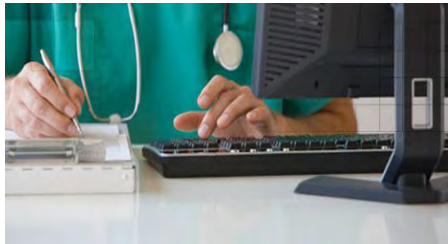


# Iowa Trauma Patient Registry Data Dictionary

## Operations Manual



**February, 2014**

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Bureau of EMS  
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## **INTRODUCTION**

Iowa Trauma System Development Act was signed into Law April 19, 1995. The State of Iowa Bureau of EMS is defined as the lead agency by Iowa Code (1995) for Iowa's EMS/trauma system. The Bureau of EMS is within the Division of Epidemiology, EMS and Disaster Preparedness, within the Iowa Department of Public Health. The all-inclusive trauma care system has been fully operational since January 1, 2001.

The three components of the Iowa Trauma System include the Trauma System Advisory Council (TSAC), System Evaluation Quality Improvement Committee (SEQIC), and the Injury Registry

The Trauma System Advisory Council (TSAC) provides recommendation on the policies and education to the IDPH. Its Subcommittees include:

- Hospital categorization and verification
- Triage and transfer protocols
- Injury registry
- Education and training
- Public information and education
- Injury prevention

The System Evaluation Quality Improvement Committee (SEQIC) is responsible for conducting trauma care system evaluation, quality assessment, and quality improvement. In addition, it ensures that the system is effective and provides recommendations to the IDPH in monitoring and performance of the trauma care system.

The Injury Registry was established as part of the State of Iowa Code: 147A.26 Trauma registry. *The Code specifications are:*

- 1. The department shall maintain a statewide trauma reporting system by which the system evaluation and quality improvement committee, the trauma system advisory council, and the department may monitor the effectiveness of the statewide trauma care system.*
- 2. The data collected by and furnished to the department pursuant to this section are confidential records of the condition, diagnosis, care, or treatment of patients or former patients, including outpatients, pursuant to section 22.7. The compilations prepared for release or dissemination from the data collected are not confidential under section 22.7, subsection 2. However, information which individually identifies patients shall not be disclosed and state and federal law regarding patient confidentiality shall apply.*
- 3. To the extent possible, activities under this section shall be coordinated with other health data collection methods.*

This document will serve as a guide for trauma nurse coordinators and data registrars in the trauma hospitals of Iowa. The success of the Registry is wholly dependent upon the day-to-day dedication of EMS personnel, health care providers, and especially the coordinators, to the specific procedures required for optimal data quality. This document is intended to provide a guideline for collecting information and offers clear instructions for completion of the required information.

## DEFINITIONS

**Trauma patient** - a victim of an external cause of injury that results in major or minor tissue damage or destruction caused by intentional or unintentional exposure to thermal, mechanical, electrical or chemical energy, or by the absence of heat or oxygen (ICD-9 International Classification of Diseases, 9th revision Codes 800.00 - 999.00).

**Farm related injury** - a non-household injury incurred on the farm (ICD9-CM 849.1) by any farmer, farm worker, farm family member, or other individual, or any non-farm injury incurred by a farmer, farm worker, or farm family member in the course of handling, producing, processing, transporting, or warehousing farm commodities.

- Indicates injury meets the farm-related injury definition. Agricultural injury may not have been necessarily work-related or directly related to the farm.
- Includes:
  - motor vehicle crash while hauling livestock or grain (some type of farm commodity)
  - motor vehicle collision with a piece of agricultural equipment on the highway
  - railroad crash of grain cars
  - tractor roll-over
  - caught in power take-off
  - unloading grain wagon
  - being struck by a piece of metal while operating a grinding wheel on the farm
  - getting caught in a barbed wire fence on the farm
  - falling or slipping on the farm
  - being bitten by, struck by, or fallen on by an animal on the farm
- Excludes:
  - injuries incurred by farmers or non-farmers who are on farm environs for a wide variety of purposes (e.g., visiting, hunting, swimming, and other recreational activities).
  - farmhouse or home premises of farm

**Traumatic brain injury (TBI)** - "clinically evident brain damage resulting from trauma or anoxia which temporarily or permanently impairs a person's physical or cognitive functions". The injury may be a penetrating or closed head injury resulting in death, or temporary or permanent impairment. Persons with brain injuries may display loss of consciousness, post-traumatic amnesia, a skull fracture, or damage to brain tissue as evidenced by neurological findings that can be reasonably attributed to a traumatic brain injury.

The following ICD9-CM codes (International Classification of Diseases, 9th revision) are used to identify cases of TBI. These codes can appear as **any** code as part of a list of diagnoses.

348.1	Anoxic brain damage. (only when accompanied by an E-code)
800.00 - 800.99	Fracture of vault of skull.
801.00 - 801.99	Fracture of base of skull.
803.00 - 803.99	Other and unqualified skull fractures.
804.00 - 804.99	Multiple fractures involving skull or face with other bones.
850.00 - 850.99	Concussion.
851.00 - 851.99	Cerebral laceration and contusion.
852.00 - 852.59	Subarachnoid, subdural, and extradural hemorrhage, following injury.
853.00 - 853.19	Other and unspecified intracranial hemorrhage following injury.
854.00 - 854.19	Intracranial injury of other and unspecified nature.
994.1	Drowning and nonfatal submersion.
994.7	Asphyxiation and strangulation.

**Traumatic Spinal Cord Injury (SCI)** - an acute, traumatic lesion of the neural elements in the spinal canal, resulting in any degree of sensory deficit, motor deficit, or bladder/bowel dysfunction. The deficit can be temporary, permanent, or result in death. The lesion can occur at any level of the spinal cord and may be complete or incomplete. Spinal cord injuries include: cauda equina, conus medullaris injuries, central cord syndrome, anterior cord syndrome, posterior cord syndrome, Brown-Sequard syndrome, mixed syndrome, and cord compression. Patients presenting neurological symptoms upon admission which resolve before hospital discharge should also be reported.

The following ICD9-CM codes (International Classification of Diseases, 9th revision, Clinical Modification, third edition) are used to identify cases of SCI. These codes can appear as **any** code of a list of diagnoses.

806.00 - 806.9            Fracture of vertebral column with spinal cord injury.  
952.00 - 952.9            Spinal cord injury without evidence of spinal bone injury.

**Traumatic brain injury and spinal cord injury reporting form** - a paper or electronic form approved by the department for submission of data elements to the department by a trauma care facility on trauma patients meeting the traumatic brain injury or traumatic spinal cord injury definition.

**Farm related injury reporting form**- a paper or electronic form approved by the department for submission of data elements to the department by a trauma care facility on trauma patients meeting the farm related injury definition.

**Transfer/Death trauma registry data set** - the set of data elements to accompany all trauma patients transferred from one trauma care facility to another, or submitted to the receiving trauma care facility within 24 hours after the transfer.

**Reportable hospital trauma registry data set** - the set of data elements to be reported to the department by a resource, regional or area trauma care facility on all trauma patients;

1. with at least one injury ICD-9 diagnosis code between 800.00 and 959.9, including 940-949 (burns) or Injury diagnoses as defined by ICD-10-CM code S00-S99, T07, T14, T20-T28, T30-T32, and T79.A1-T79.A9 code range:

**and:**

- A. who are admissions, to be defined as any patient beyond the Emergency Department, or
- B. who died after receiving any evaluation or treatment or were dead on arrival, or
- C. who were transferred into or out of the trauma care facility

**Or**

2. the trauma care facility trauma team is activated.

Patients excluded from reporting are if the injuries are ICD-9 905-909 (late effects of injuries), 910-924 (blisters, contusions, abrasions, and insect bites), and 930-939 (foreign bodies) or isolated hip fractures resulting from a same level fall unrelated to a traumatic event.

Note: to view a copy of the Patient Care Transfer Reporting Form, refer to Appendix A and to view a copy of the Inter-facility Transfer Form, refer to Appendix B.

## **Resource, Regional, and Area Trauma Care Facility Data Set Reporting Requirements**

All Resource, Regional and Area trauma care facilities shall submit to the department for each calendar quarter. Reportable trauma data shall be submitted no later than 90 days after the end of the quarter. First quarter data is due July 1<sup>st</sup>, second quarter data is due October 1<sup>st</sup>, third quarter data is due January 1<sup>st</sup>, and fourth quarter data is due April 1<sup>st</sup>.

1. Submit a farm related injury reporting form for each trauma patient meeting the farm related injury definition and receiving any evaluation or treatment or were dead on arrival.
  - a. Note: can be submitted via electronic injury registry.
2. Submit the transfer trauma registry data set or transfer form (if transferred to other care facility for acute care) and the reportable hospital trauma registry data set if the transferring facility is not entering the data into the State Trauma Registry.
3. Enter the pre-hospital data if the pre-hospital provider is not entering the data into the EMS Registry.

## **Community Trauma Care Facility Data Set Reporting Requirements**

All Community trauma care facilities shall submit to the department for each calendar quarter. Reportable trauma data shall be submitted no later than 90 days after the end of the quarter. First quarter data is due July 1<sup>st</sup>, second quarter data is due October 1<sup>st</sup>, third quarter data is due January 1<sup>st</sup>, and fourth quarter data is due April 1<sup>st</sup>.

1. Submit a farm related injury reporting form for each trauma patient meeting the farm related injury definition receiving any evaluation or treatment or were dead on arrival.
  - a. Note: can be submitted via electronic injury registry.
2. Submit a traumatic brain injury and spinal cord injury reporting form for each trauma patient who are in-patient admissions or receive evaluation or treatment for a period > 48 hours meeting the traumatic brain injury or traumatic spinal cord injury definition.
  - a. Note: can be submitted via electronic injury registry.
3. Enter the transfer or death trauma registry data set into the State Trauma Registry and submit the transfer form to the receiving hospital with the patient.
4. The Receiving Hospital shall enter the data from the transferring hospital in to the State Trauma Registry if not entered by the transferring hospital.
5. Enter the pre-hospital data if the pre-hospital provider is not entering the data into the EMS Registry.

## **HIPAA Statement**

The Iowa Department of Public Health (IDPH), in conjunction with the Attorney General's Office, has completed a comprehensive review of its programs and has determined that neither the agency as a whole, nor any of its programs, are covered entities under HIPAA. Because IDPH is not a covered entity, many agencies and facilities in Iowa that are covered entities have questioned whether they can continue to disclose the protected health information of their patients or clients to the IDPH as they have in the past. The short answer is YES, such disclosures may continue to occur under HIPAA.

First, HIPAA recognizes that if there is a statute or administrative rule that requires a specific disclosure of protected health information (PHI), a covered entity must obey that law (Section 164.512). Therefore, if there is another federal or state statute or administrative rule which requires a covered entity to disclose protected health information to the IDPH, the covered entity should follow that requirement. Many disclosures of PHI to IDPH are required by state laws, including Iowa Code chapters 135, 136A, 136B, 136C, 139A, 141A, 144, 147A, and 272C and the administrative rules that implement these chapters. These disclosures are legally required and must continue to be made as mandated by state law.

Second, HIPAA allows a covered entity to disclose protected health information to public health authorities for public health activities (Section 164.512). HIPAA defines a public health authority as "an agency or authority of the United States, a State, a territory, a political subdivision of a State or territory, or an Indian tribe, or a person or entity acting under a grant of authority from or contract with such public agency, including the employees or agents of such public agency or its contractors or persons or entities to whom it has granted authority, that is responsible for public health matters as part of its official mandate," (Section 164.501). The IDPH has such a mandate and, therefore, is a public health authority under HIPAA.

The IDPH, in conjunction with the Iowa Attorney General's Office, has reviewed its programs and determined that protected health information being received by the Department from covered entities in Iowa is disclosed for public health activities. The disclosure of such information to IDPH is, therefore, unaffected by HIPAA and should continue in accordance with past practices. Because IDPH is a public health authority that is authorized to receive PHI under this provision, covered entities are not required to enter into a business associate agreement with IDPH in order for the exchange of protected health information to take place.

Third, in some instances, the IDPH is a health oversight agency as defined by HIPAA. Under HIPAA, a "health oversight agency" is "an agency or authority of the United States, a state, a territory, a political subdivision of a State or territory, or an Indian tribe, or a person or entity acting under a grant of authority from or contract with such public agency, including the employees or agents of such public agency or its contractors or persons or entities to whom it has granted authority, that is authorized by law to oversee the health care system (whether public or private) or government programs in which health information is necessary to determine eligibility or compliance, or to enforce civil rights laws for which health information is relevant."

HIPAA permits a covered entity to disclose protected health information to a health oversight agency for oversight activities authorized by law, including audits; civil, administrative, or criminal investigations; inspections; licensure or disciplinary actions; civil, administrative, or criminal proceedings or actions; or other activities necessary for appropriate oversight of:

- i. The health care system (*e.g. State insurance commissions, state health professional licensure agencies, Offices of Inspectors General of federal agencies, the Department of Justice, state Medicaid fraud control units, Defense Criminal Investigative Services, the Pension and Welfare Benefit Administration, the HHS Office for Civil Rights, the FDA, data analysis to detect health care fraud*);
- ii. Government benefit programs for which health information is relevant to beneficiary eligibility (*e.g. SSA and Dept. of Education*);
- iii. Entities subject to government regulatory programs for which health information is necessary for determining compliance with program standards (*e.g. Occupational Health and Safety Administration and the EPA; the FDS's oversight of food, drugs, biologics, devices, and other products pursuant to the Food, Drug, and Cosmetic Act and the Public Health Service Act*); or
- iv. Entities subject to civil rights laws for which health information is necessary for determining compliance (*the U.S. Department of Justice's civil rights enforcement activities, enforcement of the Civil Rights of Institutionalized Persons Act, the Americans with Disabilities Act, the EEOC's civil rights enforcement activities under titles I and V of the ADA*) (Section 164.512(d)).

"Overseeing the health care system," encompasses activities such as oversight of health care plans, oversight of health benefit plans; oversight of health care providers; oversight of health care and health care delivery; oversight activities that involve resolution of consumer complaints; oversight of pharmaceutical, medical products and devices, and dietary supplements; and a health oversight agency's analysis of trends in health care costs, quality, health care delivery, access to care, and health insurance coverage for health oversight purposes.

Health oversight agencies may provide more than one type of health oversight. Such entities are considered health oversight agencies under the rule for any and all of the health oversight functions that they perform. The disclosure of protected health information to IDPH for these purposes is unaffected by HIPAA and should continue in accordance with past practices.

Finally, local public health departments and local contractors, which are covered entities, may release protected health information to IDPH under the above-cited legal authority applicable to all covered entities. For example, certain statutes and rules require local public health departments and local contractors to disclose protected health information to IDPH. Further, as a health oversight agency a local health department is permitted, and in most cases required, to disclose protected health information to IDPH. Disclosures of PHI by local public health departments and local contractors to IDPH do not require business associate agreements and are not prohibited or otherwise affected by HIPAA.



## **ACKNOWLEDGEMENTS**

We would like to thank the members of the Iowa Trauma Registry Subcommittee, and all the members of the Iowa Trauma Registry Advisory Committee and Trauma Nurse Coordinators for their continued input into the trauma registry manual. In addition, we would like to thank James Torner and Tracy Young (University of Iowa Injury Prevention Research Center) for their input and design of this manual.

## **SOFTWARE**

The Iowa Department of Public Health is required by law to seek bids from software vendors tri-annually. For those seeking further information on application and contracting opportunities, please contact the Iowa Department of Administrative Services, General Services Enterprise, <http://das.gse.iowa.gov/>.

DRAFT

## Common Variables

This section contains common variables to be added by the first provider in the system whether it is the *EMS transporting unit or Referring/Receiving Hospital*.

### DEMOGRAPHIC INFORMATION

#### Patient Social Security Number - 1

Name: SSN\_1  
Definition: Indicates first 3-digits of Social Security number of trauma patient.  
Calculated/Entered: Entered  
Code: XXX, NA (Not applicable), NK/NR (Not known/Not reported)  
Range: N/A  
Max Length (Type): 3 (Integer)

#### Patient Social Security Number - 2

Name: SSN\_2  
Definition: Indicates 4<sup>th</sup> and 5<sup>th</sup> (middle 2 digits) digits of Social Security number of trauma patient.  
Calculated/Entered: Entered  
Code: XX, NA (Not applicable), NK/NR (Not known/Not reported)  
Range: N/A  
Max Length (Type): 2 (Integer)

#### Patient Social Security Number - 3

Name: SSN\_3  
Definition: Indicates last 4-digits of Social Security number of trauma patient.  
Calculated/Entered: Entered  
Code: XXXX, NA (Not applicable), NK/NR (Not known/Not reported)  
Range: N/A  
Max Length (Type): 4 (Integer)

#### Patient Last Name

Name: P\_NAM\_L  
Definition: Indicates last name of trauma patient.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

#### Patient First Name

Name: P\_NAM\_F  
Definition: Indicates first name of trauma patient.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Patient Middle Initial**

Name: P\_NAM\_M  
Definition: Indicates middle initial of trauma patient.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 1 (String)

**Patient Date of Birth**

Name: DOB  
Definition: Indicates date of birth of trauma patient.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1890-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Patient Age**

Name: RAW\_AGE  
Definition: Indicates age of trauma patient at time of injury.  
Calculated/Entered: Calculated  
Code: N/A  
Range: 0-120  
Max Length (Type): 3 (Integer)

**Patient Age Type**

Name: AGE\_TYPE  
Definition: Units used to document patient's age.  
Calculated/Entered: Calculated  
Code: 1 = Hours  
2 = Days  
3 = Months  
4 = Years  
NA = Not applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**Patient Race\***

Name: RACE  
Definition: Indicates race of trauma patient.  
Calculated/Entered: Entered  
Code: 1 = Asian  
2 = Native Hawaiian or Other Pacific Islander  
3 = Other Race  
4 = American Indian  
5 = Black or African American  
6 = White  
NA = Not applicable  
NK/NR = Not known/Not recorded  
1-6

1 (Integer)

\* U.S. Census Bureau, 2000 Census

**Patient Ethnicity\***

Name: ETHNIC  
Definition: Indicates ethnicity of trauma patient.  
Calculated/Entered: Entered  
Code: 1 = Hispanic or Latino  
2 = Non-Hispanic or Latino  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Patient Sex**

Name: SEX  
Definition: Indicates sex of trauma patient.  
Calculated/Entered: Entered  
Code: 1 = Male  
2 = Female  
NA = Not applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Patient Marital Status**

Name: MARRIED  
Definition: Indicates patient's marital status at time of injury.  
Calculated/Entered: Entered  
Code: 1 = Single  
2 = Married  
3 = Widowed  
4 = Divorced  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**Patient Home Street Address – Street 1**

Name: P\_ADR\_S1  
Definition: Indicates home street address of trauma patient.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Patient Home Street Address – Street 2**

Name: P\_ADR\_S2  
Definition: Indicates home street address of trauma patient.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Patient Home ZIP Code (Some of these do not map correctly—i.e. Cedar Rapids, Des Moines examples**  
<http://zipcodedownload.com/Products/Product/Z5Commercial/Standard/Overview/>)

Name: P\_ADR\_Z1  
Definition: Indicates home zip code of trauma patient.  
Calculated/Entered: Entered  
Code: XXXXX  
Range: N/A  
Max Length (Type): 5 (String)

**Patient Home ZIP Code – if other**

Name: P\_ADR\_Z2  
Definition: Indicates additional four-digits of trauma patient's home zip code.  
Calculated/Entered: Entered  
Code: XXXX  
Range: N/A  
Max Length (Type): 4 (String)

**Patient Home City Name**

Name: P\_ADR\_CI  
Definition: Trauma patient's city of residence.  
Calculated/Entered: Used to calculate FIPS code.  
Range: N/A  
Max Length (Type): 40 (String)

**Patient Home County**

Name: P\_ADR\_CO  
Definition: Trauma patient's county of residence.  
Calculated/Entered: Automatically filled in based on Zip code.  
Code: FIPS code (Refer to Appendix D)  
Range: N/A  
Max Length (Type): 5 (String)

**Patient Home State**

Name: P\_ADR\_ST  
Definition: Indicates the state where the trauma patient resides.  
Calculated/Entered: Used to calculate FIPS code.  
Code: Two digit numeric FIPS code.  
Range: N/A  
Max Length (Type): 2 (String)

**Patient Phone Number**

Name: P\_PH\_NUM  
Definition: Patient's home phone number  
Calculated/Entered: Entered  
Code: XXX-XXX-XXXX  
Range: N/A  
Max Length (Type): 12 (String)

**Alternate Home Residence**

Name: P\_ALT\_ADR  
Definition: Documentation of the type of patient without a home zip code  
Calculated/Entered: Entered  
Code: 1=Homeless  
2=Undocumented Citizen  
3=Migrant Worker  
4=Foreign Visitor  
Range: N/A  
Max Length (Type): 2 (Integer)

**Parent/Guardian Last Name**

Name: R\_NAM\_L  
Definition: Indicates last name of parent/guardian.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Parent/Guardian First Name**

Name: R\_NAM\_F  
Definition: Indicates first name of parent/guardian.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Parent/Guardian Middle Initial**

Name: R\_NAM\_M  
Definition: Indicates middle initial of parent/guardian  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 1 (String)

**Parent/Guardian Date of Birth**

Name: R\_DOB  
Definition: Indicates date of birth of parent/guardian  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1890-01-01 TO 2030-01-01  
Max Length (Type): 10 (Date)

**Parent/Guardian Age**

Name: R\_AGE  
Definition: Indicates age of parent/guardian.  
Calculated/Entered: Calculated  
Code: N/A  
Range: 0-120  
Max Length (Type): 3 (Integer)

**Parent/Guardian Sex**

Name: R\_SEX  
Definition: Indicates sex of parent/guardian.  
Calculated/Entered: Entered  
Code: 1 = Male  
2 = Female  
NA = Not applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Parent/Guardian Phone Number**

Name: R\_PH\_NUM  
Definition: Parent/guardian's home phone number  
Calculated/Entered: Entered  
Code: XXX-XXX-XXXX  
Range: N/A  
Max Length (Type): 12 (String)

---

## INJURY INFORMATION

### Injury Date

Name: INJ\_DATE  
Definition: Indicates date injury was sustained by trauma patient.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Injury Time

Name: INJ\_TIME  
Definition: Indicates time injury was sustained by trauma patient (or nearest estimation).  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length (Type): 5 (Time)

### Primary Injury Type

Name: INJ\_TYPE  
Definition: Indicates primary mechanism or type of force causing injury to trauma patient. "Blunt" is an injury resulting from diffuse force, nonpenetrating. "Penetrating" is an injury resulting from tissue penetration or perforation by an object, generally associated with high energy forces (MTOS definitions). "Thermal" is a burn or injury due to heat or cold (Refer to Appendix F). If there is more than one mechanism of injury, enter the force that caused the most severe injury (use AIS to determine this). If two or more injuries tie for highest AIS, then code and enter the mechanism of the next most severe injury (MTOS).  
Calculated/Entered: Calculated  
Code: 1 = Blunt  
2 = Penetrating  
3 = Burn/Thermal  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-3  
Max Length (Type): 1 (Integer)

### Primary E-Code Cause

Name: E\_CODE1  
Definition: Indicates primary external cause of injury. Used to auto-generate Injury type.  
Calculated/Entered: Entered  
Code: Valid ICD-9 E-Code Cause (use pull-down menu)  
Range: N/A  
Max Length (Type): 5 (String)



**Secondary E-Code Cause**

Name: E\_CODE2  
 Definition: Indicates secondary external cause of injury.  
 Calculated/Entered: Entered  
 Code: Valid ICD-9 E-Code Cause (use pull-down menu)  
 Range: N/A  
 Max Length (Type): 5 (String)

**Primary External Cause**

Name: CAUSEICD10\_1  
 Definition: Indicates primary external cause of injury.  
 Calculated/Entered: Entered  
 Code: Valid ICD-10 E-Code Cause (use pull-down menu)  
 Range: N/A  
 Max Length (Type): 8 (String)

**Secondary External Cause**

Name: CAUSEICD10\_2  
 Definition: Indicates secondary external cause of injury.  
 Calculated/Entered: Entered  
 Code: Valid ICD-10 E-Code Cause (use pull-down menu)  
 Range: N/A  
 Max Length (Type): 8 (String)

**Cause of Injury Narrative**

Name: CAUSE\_INJ  
 Definition: Additional information describing the injury event (i.e., factors relevant to the injury event). If farm-related or work-related cause of injury, add in activity engaged in before injured.  
 Calculated/Entered: Entered  
 Code: Up to 200 characters in length.  
 Range: N/A  
 Max Length (Type): 200 (String)

**Work Related**

Name: WORK\_YN  
 Definition: Indicates whether injury was work-related. To qualify as work-related, patient was compensated at time of injury, injury occurred at place of work or while traveling yet was part of their work, and activity was related to work-function of job (e.g., traveling to a meeting). If work-related, two additional fields must be completed: Patient's Occupational Industry and Patient's Occupation.  
 Calculated/Entered: Entered  
 Code: 1 = Yes  
       2 = No  
       NA = Not applicable  
       NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 1 (Integer)

### **Patient's Occupational Industry [ADD WEBLINK WITH DEFINITIONS]**

Name: OCCUP\_IND  
 Definition: The occupational industry associated with the patient's work environment.  
 Calculated/Entered: Entered  
 Code: 1= Finance, Insurance, and Real Estate  
 2= Manufacturing  
 3= Retail Trade  
 4= Transportation and Public Utilities  
 5= Agriculture, Forestry, Fishing  
 6= Professional and Business Services  
 7= Education and Health Services  
 8= Construction  
 9= Government  
 10= Natural Resources and Mining  
 11= Information Services  
 12= Wholesale Trade  
 13= Leisure and Hospitality  
 14= Other Services  
 NA = Not applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-14  
 Max Length (Type): 2 (Integer)

### **Patient's Occupation [ADD WEBLINK WITH DEFINITIONS]**

Name: OCCUP  
 Definition: The occupation of the patient  
 Calculated/Entered: Entered  
 Code: 1 = Business and Financial Operations Occupations  
 2 = Architecture and Engineering Occupations  
 3 = Community and Social Services Occupations  
 4 = Education, Training, and Library Occupations  
 5 = Healthcare Practitioners and Technical Occupations  
 6 = Protective Service Occupations  
 7 = Building and Grounds Cleaning and Maintenance  
 8 = Sales and Related Occupations  
 9 = Farming, Fishing, and Forestry Occupations  
 10 = Installation, Maintenance, and Repair Occupations  
 11 = Transportation and Material Moving Occupations  
 12 = Management Occupations  
 13 = Computer and Mathematical Occupations  
 14 = Life, Physical, and Social Science Occupations  
 15 = Legal Occupations  
 16 = Arts, Design, Entertainment, Sports, and Media  
 17 = Healthcare Support Occupations  
 18 = Food Preparation and Serving Related  
 19 = Personal Care and Service Occupations  
 20 = Office and Administrative Support Occupations  
 21 = Construction and Extraction Occupations

22 = Production Occupations  
23 = Military Specific Occupations  
Range: 1-23  
Max Length (Type): 2 (Integer)

**Name of Employer**

Name: EMPL\_NAME  
Definition: Name of employer (include only if occupation-related injury).  
Calculated/Entered: Entered  
Code: N/A  
Range: N/A  
Max Length (Type): 100 (String)

**Job Title**

Name: JOB\_TITLE  
Definition: Indicate your job title (include only if occupation-related injury).  
Calculated/Entered: Entered  
Code: N/A  
Range: N/A  
Max Length (Type): 50 (String)

**Job Duties**

Name: JOB\_DUTIES  
Definition: Indicate your main job duties (include only if occupation-related injury).  
Calculated/Entered: Entered  
Code: N/A  
Range: N/A  
Max Length (Type): 200 (String)

**Employer Phone Number**

Name: EMPL\_PH\_NUM  
Definition: Indicates phone number of employer (include only if occupation-related injury).  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 12 (String)

**Employer Street Address – Street 1**

Name: EMPL\_ADR\_S1  
Definition: Indicates street address of employer (include only if occupation-related injury).  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 50 (String)

**Employer ZIP Code (Some of these do not map correctly—i.e. Cedar Rapids, Des Moines examples)**  
<http://zipcodedownload.com/Products/Product/Z5Commercial/Standard/Overview/>

Name: EMPL\_ADR\_Z1  
Definition: Indicates zip code of employer (include only if occupation-related injury).  
Code: XXXXX  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 5 (String)

### Employer City Name

Name: EMPL\_ADR\_CI  
Definition: City of employer (include only if occupation-related injury).  
Calculated/Entered: Used to calculate FIPS code.  
Range: N/A  
Max Length (Type): 40 (String)

### Employer County

Name: EMPL\_ADR\_CO  
Definition: County of employer (include only if occupation-related injury).  
Calculated/Entered: Automatically filled in based on Zip code.  
Code: FIPS code (Refer to Appendix D)  
Range: N/A  
Max Length (Type): 5 (String)

### Employer State

Name: EMPL\_ADR\_ST  
Definition: Indicates the state of employer (include only if occupation-related injury).  
Calculated/Entered: Used to calculate FIPS code.  
Code: Two digit numeric FIPS code.  
Range: N/A  
Max Length (Type): 2 (String)

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**Farm and Agricultural Related**

Name: FARM\_YN  
Definition: Indicates injury meets the farm-related injury definition. Agricultural injury (e.g., grain truck accident while in transit, railroad crash of grain cars). May not have been necessarily work-related or directly related to the farm.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Off-Farm Employment/Secondary Occupation**

Name: FARM\_OCCUP2  
Definition: Indicates secondary occupation of patient (include only if farm/ag-related).  
Calculated/Entered: Entered  
Code: 1 = Business and Financial Operations Occupations  
2 = Architecture and Engineering Occupations  
3 = Community and Social Services Occupations  
4 = Education, Training, and Library Occupations  
5 = Healthcare Practitioners and Technical Occupations  
6 = Protective Service Occupations  
7 = Building and Grounds Cleaning and Maintenance  
8 = Sales and Related Occupations  
9 = Farming, Fishing, and Forestry Occupations  
10 = Installation, Maintenance, and Repair Occupations  
11 = Transportation and Material Moving Occupations  
12 = Management Occupations  
13 = Computer and Mathematical Occupations  
14 = Life, Physical, and Social Science Occupations  
15 = Legal Occupations  
16 = Arts, Design, Entertainment, Sports, and Media  
17 = Healthcare Support Occupations  
18 = Food Preparation and Serving Related  
19 = Personal Care and Service Occupations  
20 = Office and Administrative Support Occupations  
21 = Construction and Extraction Occupations  
22 = Production Occupations  
23 = Military Specific Occupations  
Range: 1-23  
Max Length (Type): 2 (Integer)

**Date Reported to IDPH**

Name: REP\_DATE\_IDPH  
Definition: Indicates date Brain/Spinal cord or farm/ag-related injury was reported to IDPH.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Reporter Position/Title**

Name: REP\_POSITION  
Definition: Indicates position/title of person who reported Brain/Spinal cord or farm/ag-related injury to IDPH.  
Calculated/Entered: Entered  
Code: N/A  
Range: N/A  
Max Length (Type): 50 (String)

**Reporter Phone Number**

Name: REP\_PH\_NUM  
Definition: Indicates phone number of person who reported Brain/Spinal cord or farm/ag-related injury to IDPH.  
Calculated/Entered: Entered  
Code: XXX-XXX-XXXX  
Range: N/A  
Max Length (Type): 12 (String)

**Inter-Personal Violence Related**

Name: IPV\_YN  
Definition: Indicates injury/death was the result of the intentional use of physical force or power, threatened or actual, against another person or against a group or community.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Primary E-Code Place of Injury**

Name: E849\_X1  
Definition: Indicates primary place of injury occurrence, corresponds with primary external cause of injury (ICD-9-CM codes; E849.X).  
Calculated/Entered: Entered  
Code: 0 = Home--includes house (residential), apartment, boarding house, farm house, home premises, and noninstitutional place of residence (yard, driveway, garage, garden, home, sidewalk, swimming pool in

private house or garden, yard of home); excludes home under construction but not yet occupied (E849.3) and institutional place of residence (E849.7)

1 = Farm--includes buildings, land under cultivation; excludes farm house and home premises of farm

2 = Mine and quarry--includes gravel pit, sand pit, tunnel under construction

3 = Industrial place and premises--includes building under construction, dockyard, dry dock, factory (building and premises), garage (place of work), industrial yard, loading platform (factory and store), industrial plant, railway yard, shop (place of work), warehouse, workhouse

4 = Place for recreation and sport--includes amusement park, baseball field, basketball court, beach resort, cricket ground, fives court, football field, golf course, gymnasium, hockey field, holiday camp, ice palace, lake resort, mountain resort, playground (including school playground), public park, racecourse, resort NOS, riding school, rifle range, seashore resort, skating rink, sports palace, stadium, swimming pool, tennis court, vacation resort; excludes that in private house or garden (E849.0)

5 = Street/highway

6 = Public building—building (includes adjacent grounds) used by the general public or by a particular group of the public, such as: airport, bank, bus/railway station, café, casino, church, cinema, clubhouse, commercial shops, courthouse, dance hall, garage building (for car storage), gas station, hotel, market (grocery or

other commodity), movie house, music hall, nightclub, office, office building, opera house, post office, public hall, radio broadcasting station, restaurant, school (state, public, private), store, theater; excludes home garage and industrial building/workplace

7 = Residential institution--include children's home, dormitory, hospital, jail, nursing home, old people's home, orphanage, prison, reform school

8 = Other specified places--includes beach NOS, canal, caravan site NOS, derelict house, desert, dock, forest, harbor, hill, lake NOS, mountain, parking lot, parking place, pond or pool, prairie, public place NOS, railway line, reservoir, river, sea, seashore NOS, stream, swamp, trailer court, and woods

9 = Unspecified place

NA = Not Applicable

NK/NR = Not known/Not recorded

Range: 0-9

Max Length (Type): 1 (Integer)

### Primary E-Code Place of Injury

Name: Y92\_X1

Definition: Indicates primary place of injury occurrence, corresponds with primary external cause of injury (ICD-10-CM codes; Y92.X-Y92.XXX).

Calculated/Entered: Entered

- Code: .1 Residential institution  
Children's home  
Dormitory  
Home for the sick  
Hospice  
Military camp  
Nursing home  
Old people's home  
Orphanage  
Pensioner's home  
Prison  
Reform school
- .2 School, other institution and public administrative area  
Building (including adjacent grounds) used by the general public or by a particular group of the public such as:  
assembly hall  
campus  
church  
cinema  
clubhouse  
college  
court-house  
dancehall  
day nursery  
gallery  
hospital  
institute for higher education  
kindergarten  
library  
movie-house  
museum  
music-hall  
opera-house  
post office  
public hall  
school (private)(public)(state)  
theatre  
university  
youth centre
- Excludes: building under construction (.6)  
residential institution (.1)  
sports and athletics area (.3)
- .3 Sports and athletics area  
Baseball field  
Basketball-court  
Cricket ground  
Football field  
Golf-course  
Gymnasium  
Hockey field



Riding-school  
Skating-rink  
Squash-court  
Stadium  
Swimming-pool, public  
Tennis-court

Excludes: swimming-pool or tennis-court in private home or garden (.0)

.4 Street and highway

Freeway  
Motorway  
Pavement  
Road  
Sidewalk

.5 Trade and service area

Airport  
Bank  
Cafe  
Casino  
Garage (commercial)  
Gas station  
Hotel  
Market  
Office building  
Petrol station  
Radio or television station  
Restaurant  
Service station  
Shop (commercial)  
Shopping mall  
Station (bus)(railway)  
Store  
Supermarket  
Warehouse

Excludes: garage in private home (.0)

.6 Industrial and construction area

Building [any] under construction  
Dockyard  
Dry dock  
Factory:  
building  
premises  
Gasworks  
Industrial yard  
Mine  
Oil rig and other offshore installations  
Pit (coal)(gravel)(sand)  
Power-station (coal)(nuclear)(oil)  
Shipyard

Tunnel under construction  
Workshop

.7 Farm

Farm:  
buildings  
land under cultivation  
Ranch

Excludes: farmhouse and home premises of farm (.0)

.8 Other specified places

Beach  
Campsite  
Canal  
Caravan site NOS  
Derelict house  
Desert  
Dock NOS  
Forest  
Harbour  
Hill  
Lake  
Marsh  
Military training ground  
Mountain  
Park (amusement) (public)  
Parking-lot and parking place  
Pond or pool  
Prairie  
Public place NOS  
Railway line  
River  
Sea  
Seashore  
Stream  
Swamp  
Water reservoir  
Zoo

.9 Unspecified place

NA = Not Applicable

NK/NR = Not known/Not recorded

Range: Y92.0-Y92.9

Max Length (Type): 7 (String)

**Secondary E-Code Place of Injury**

Name: E849\_X2  
Definition: Indicates secondary place of injury occurrence, if secondary external cause of injury code is entered (ICD-9-CM codes; E849.X)  
Calculated/Entered: Entered  
Code: Valid ICD-9 E-Code Place (same as Primary E-Code Place of Injury)  
Range: 0-9  
Max Length (Type): 6 (String)

**Secondary E-Code Place of Injury**

Name: Y92\_X2  
Definition: Indicates primary place of injury occurrence, corresponds with primary external cause of injury (ICD-10-CM codes; Y92.X-Y92.XXX).  
Calculated/Entered: Entered  
Code: Valid ICD-10-CM E-Code Place (same as Primary E-Code Place of Injury)  
Range: Y92.0-Y92.9  
Max Length (Type): 7 (String)

**Place of Injury Description**

Name: PLACE\_INJ  
Definition: Narrative description of place of injury  
Calculated/Entered: Entered  
Code: Up to 200 characters in length.  
Range: N/A  
Max Length (Type): 200 (String)

**Incident Zip code**

Name: I\_ADR\_Z1  
Definition: Indicates zip code of trauma patient injury scene.  
Calculated/Entered: Entered  
Code: XXXXX  
Range: N/A  
Max Length (Type): 5 (Integer)

**Incident Zip code, if other**

Name: I\_ADR\_Z2  
Definition: Indicates the four-digit extension of zip code of trauma patient injury scene.  
Calculated/Entered: Entered  
Code: XXXX  
Range: N/A  
Max Length (Type): 4 (Integer)

**Incident City**

Name: I\_ADR\_CI  
Definition: Indicates city name for scene of trauma patient injury.  
Calculated/Entered: Automatically filled in based on Zip code.  
Code: Five digit FIPS code.

Range: N/A  
Max Length (Type): 5 (String)

**Incident County**

Name: I\_ADR\_CO  
Definition: Indicates FIPS code for county of trauma patient injury scene.  
Calculated/Entered: Automatically filled in based on Zip code.  
Code: Three digit FIPS code.  
Range: N/A  
Max Length (Type): 3 (String)

**Incident State**

Name: I\_ADR\_ST  
Definition: Indicates state name for scene of trauma patient injury.  
Calculated/Entered: Automatically filled in based on Zip code.  
Code: Two digit numeric FIPS code. Used to calculate FIPS code.  
Range: N/A  
Max Length (Type): 2 (String)

**Injury Site Same as Patient's Home Address**

Name: I\_ADR\_EQ\_P\_ADR  
Definition: Indicates whether the place where the injury occurred was same as patient's home address.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

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## PRE-HOSPITAL (EMS) DATA

***This information is to be collected by the EMS transporting unit and submitted to the EMS Registry and provided to the Receiving Hospital. If the transporting EMS service cannot enter the data into the EMS Registry then the Receiving Hospital should enter the data.***

### EMS Agency Number (Scene to First Facility)

Name: P1\_AGEN, P2\_AGEN, P3\_AGEN  
Definition: Indicates out of hospital service program number  
Calculated/Entered: Entered  
Code: State specific identifier (Refer to Appendix G)  
Range: N/A  
Max Length (Type): 7 (Integer)

### Report Number

Name: P1\_R\_NUM, P2\_R\_NUM, P3\_R\_NUM  
Definition: Indicates out of hospital service report number for this run  
Calculated/Entered: Entered  
Code: Up to 12 characters  
Range: N/A  
Max Length (Type): 12 (String)

### Report Available

Name: P1\_R\_AV, P2\_R\_AV, P3\_R\_AV  
Definition: Indicates whether out of hospital service report for this run is available at this facility  
Calculated/Entered: Entered  
Code:  
1 = Received, complete, legible, in a timely fashion (< 24 hours)  
2 = Received, complete, legible, not in a timely fashion  
3 = Received, incomplete (all or missing)  
4 = Received, Illegible  
5 = Not received  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-5  
Max Length (Type): 1 (Integer)

### Dispatch to Scene Date

Name: P1\_D\_DATE, P2\_D\_DATE, P3\_D\_DATE  
Definition: Indicates date out of hospital provider was dispatched to scene or to pick up patient  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Dispatch to Scene Time**

Name: P1\_D\_TIME, P2\_D\_TIME, P3\_D\_TIME  
Definition: Indicates time out of hospital provider was dispatched to scene or to pick up patient Up to three provider dispatch times may be chosen.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length (Type): 5 (Time)

**Scene Arrival Date**

Name: P1\_A\_DATE, P2\_A\_DATE, P3\_A\_DATE  
Definition: Indicates date out of hospital provider arrived at scene  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Scene Arrival Time**

Name: P1\_A\_TIME, P2\_A\_TIME, P3\_A\_TIME  
Definition: Indicates time out of hospital provider arrived at scene/patient  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length (Type): 5 (Time)

**Scene Departure Date**

Name: P1\_L\_DATE, P2\_L\_DATE, P3\_L\_DATE  
Definition: Indicates date out of hospital provider left scene/patient for TCF  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Scene Departure Time**

Name: P1\_L\_TIME, P2\_L\_TIME, P3\_L\_TIME  
Definition: Indicates time out of hospital provider left scene for TCF  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length (Type): 5 (Time)

**Cardiac Arrest**

Name: P1\_C\_YN, P2\_C\_YN, P3\_C\_YN  
Definition: Indicates whether cardiac arrest occurred before out of hospital transport arrived at TCF  
Calculated/Entered: Entered

Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Yes/No)

### Out of Hospital Initial Systolic Blood Pressure

Name: P1\_SBP, P2\_SBP, P3\_SBP  
Definition: Indicates initial out of hospital systolic blood pressure  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-300, NA, NK/NR  
Max Length (Type): 3 (Integer)

### Out of Hospital Initial Pulse Rate

Name: P1\_HR, P2\_HR, P3\_HR  
Definition: Indicates initial out of hospital pulse rate  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-299, NA, NK/NR  
Max Length (Type): 3 (Integer)

### Out of Hospital Initial Unassisted Respiratory Rate

Name: P1\_RR, P2\_RR, P3\_RR  
Definition: Indicates initial, unassisted out of hospital respiratory rate  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-120, NA, NK/NR  
Max Length (Type): 3 (Integer)

### Out of Hospital Initial Glasgow Coma Scale (GCS) Eye

Name: P1\_GCS\_EO, P2\_GCS\_EO, P3\_GCS\_EO  
Definition: Indicates initial out of hospital Glasgow Coma Scale Eye Component.  
Calculated/Entered: Entered  
Code: **Pediatric ( $\leq 2$  years)/Adults**  
1 = No eye movement when assessed  
2 = Opens eyes in response to painful stimulation  
3 = Opens eyes in response to verbal stimulation  
4 = Opens eyes spontaneously  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**Out of Hospital Initial GCS Verbal**

Name: P1\_GCS\_VR, P2\_GCS\_VR, P3\_GCS\_VR  
 Definition: Indicates initial out of hospital Glasgow Coma Scale Verbal Component  
 Calculated/Entered: Entered  
 Code: **Pediatric ( $\leq 2$  years)**  
     1 = No vocal response  
     2 = Inconsolable, agitated  
     3 = Inconsistently consolable, moaning  
     4 = Cries but is consolable, inappropriate interactions  
     5 = Smiles, oriented to sounds, follows objects, interacts  
     **Adult**  
     1 = No verbal response  
     2 = Incomprehensible sounds  
     3 = Inappropriate words  
     4 = Confused  
     5 = Oriented  
     NA = Not Applicable  
     NK/NR = Not known/Not recorded  
 Range: 1-5  
 Max Length (Type): 1 (Integer)

**Out of Hospital Initial GCS Motor**

Name: P1\_GCS\_MR, P2\_GCS\_MR, P3\_GCS\_MR  
 Definition: Indicates initial out of hospital Glasgow Coma Scale Motor Component.  
 Calculated/Entered: Entered  
 Code: **Pediatric ( $\leq 2$  years)**  
     1 = No motor response  
     2 = Extension to pain  
     3 = Flexion to pain  
     4 = Withdrawal from pain  
     5 = Localizing pain  
     6 = Appropriate response to stimulation  
     NA = Not Applicable  
     NK/NR = Not known/Not recorded  
     **Adult**  
     1 = No motor response  
     2 = Extension to pain  
     3 = Flexion to pain  
     4 = Withdrawal from pain  
     5 = Localizing pain  
     6 = Obeys commands  
     NA = Not Applicable  
     NK/NR = Not known/Not recorded  
 Range: 1-6  
 Max Length (Type): 1 (Integer)

**Out of Hospital Initial Glasgow Coma Scale Total**

Name: P1\_GCS\_TT, P2\_GCS\_TT, P3\_GCS\_TT  
 Definition: Indicates total initial out of hospital Glasgow Coma Scale obtained.  
 Calculated/Entered: Entered



Code: N/A  
Range: 3-15, NA, NK/NR  
Max Length (Type): 2 (Integer)

### Protective Devices

Name: PDEV\_1 – PDEV\_5  
Definition: Indicates protective device **used** by trauma patient at time of injury  
Up to five criteria may be chosen May be determined by EMS report, interview with patient, social worker, or medical records.

- Check all that apply.
- If “Child Restraint” is present, complete variable “Child Specific Restraint.”
- If “Airbag” is present, complete variable “Airbag Deployment.”
- Evidence of the use of safety equipment may be reported or observed.
- Lap Belt should be used to include those patients that are restrained, but not further specified.
- If chart indicates “3-point-restraint” choose 2 and 10.

Calculated/Entered: Entered

Code: 1 None  
2 Lap Belt  
3 Personal Floatation Device  
4 Protective Non-Clothing Gear (e.g., shin guard)  
5 Eye Protection  
6 Child Restraint (booster seat or child car seat)  
7 Helmet (e.g., bicycle, skiing, motorcycle)  
8 Airbag Present  
9 Protective Clothing (e.g., padded leather pants)  
10 Shoulder Belt  
11 Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded.  
Range: 1-11  
Max Length (Type): 2 (Integer)

### Child Specific Restraint

Name: PDEV\_CHILD  
Definition: Protective child restraint devices used by patient at the time of injury

Calculated/Entered: Entered

Code: 1 = Child Car Seat  
2 = Infant Car Seat  
3 = Child Booster Seat  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-3  
Max Length (Type): 1 (Integer)

**Airbag Deployment**

Name: AIRBAGDEP\_1-AIRBAGDEP\_4  
 Definition: Indication of airbag deployment during a motor vehicle crash. Up to four criteria may be chosen. May be determined by EMS report, interview with patient, social worker, or medical records.  
 • Check all that apply.

Calculated/Entered: Entered

Code: 1 = Airbag Not Deployed  
 2 = Airbag Deployed Front  
 3 = Airbag Deployed Side  
 4 = Airbag Deployed Other (knee, air belt, curtain, etc.)  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-4  
 Max Length (Type): 2 (String)

**Out of Hospital Procedures**

Name: PH\_01\_ICD9PR – PH\_44\_ICD9PR  
 Definition: Indicates procedures performed prior to arrival at a trauma care facility, such as what is indicated on the ambulance/flight report Up to 44 procedure codes may be entered (ICD-9-CM procedure codes).  
 Calculated/Entered: Entered  
 Code: For pre-hospital/transferring facility procedures the following codes **shall be used**, the remaining codes are optional:

99.29 = Peripheral IV\*  
 38.93 = Central Line\*  
 96.81 = Combitube\*  
 31.18 = Cricothyrotomy (Emergent tracheostomy)\*  
 31.19 = Percutaneous Tracheostomy\*  
 96.01 = Ins, Nasopharyngeal Airway\*  
 96.02 = Ins, Oropharyngeal Airway\*  
 99.60 = CPR\*  
 96.04 = Endotracheal Tube\*  
 99.04 = PRBC Administration  
 34.04 = Chest Tube  
 57.94 = Indwelling urinary catheter  
 34.09 = Needle Chest Decompression  
 96.07 = Gastric Tube  
 41.92 = Intraosseous  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: N/A  
 Max Length (Type): 7 (String)

**Out of Hospital Procedures**

Name: PH\_01\_ICD10PR – PH\_44\_ICD10PR  
 Definition: Indicates procedures performed prior to arrival at a trauma care facility, such as what is indicated on the ambulance/flight report Up to 44 procedure codes may be entered (ICD-10-CM procedure codes).

Calculated: Entered  
 Code: (See below)  
 Range: N/A  
 Max Length (Type): 7 (String)

**Diagnostic and Therapeutic Imaging**

Computerized tomographic studies \*

Diagnostic ultrasound (includes FAST) \*

Doppler ultrasound of extremities \*

Angiography

Angioembolization

Echocardiography

Cystogram

IVC filter

Urethrogram

**Cardiovascular**

Central venous catheter \*

Pulmonary artery catheter \*

Cardiac output monitoring \*

Open cardiac massage

CPR

**CNS**

Insertion of ICP monitor \*

Ventriculostomy \*

**Genitourinary**

Ureteric catheterization (i.e. Ureteric stent)

Suprapubic cystostomy

**Transfusion**

The following blood products should be captured over first 24 hours after hospital arrival:

Transfusion of red cells \*

Transfusion of platelets \*

Transfusion of plasma \*

In addition to coding the individual blood products listed above assign the appropriate procedure code on patients that receive > 10 units of blood products over first 24 hours following hospital arrival \*

For pediatric patients (age 14 and under), assign the appropriate procedure code on patients that receive 40cc/kg of blood products over first 24 hours following hospital arrival\*

**Respiratory**

Insertion of endotracheal tube\*

Continuous mechanical ventilation \*

Chest tube \*

Bronchoscopy \*

Tracheostomy

**Gastrointestinal**

Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)

Cerebral oxygen monitoring \*

Gastrostomy/jejunostomy (percutaneous or endoscopic)  
 Percutaneous (endoscopic) gastrojejunoscopy

**Musculoskeletal**

Soft tissue/bony debridements \*  
 Closed/Open reduction of fractures  
 Skeletal and halo traction  
 Fasciotomy

**Other**

Hyperbaric oxygen  
 Decompression chamber  
 TPN \*

**Out of Hospital Procedure Code Location**

Name: PH\_01\_LC – PH\_44\_LC  
 Definition: Indicates location of procedures performed prior to arrival at a trauma care facility Up to 44 procedure locations may be entered.  
 Calculated/Entered: Entered  
 Code: 1 = Scene  
 2 = Transport from Scene  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 1 (Integer)

**Trauma System Activation EMS**

Name: EMS\_ENTRY\_SYS  
 Definition: Indicates information used to identify patient as a trauma patient meriting a trauma service response by the EMS provider  
 Calculated/Entered: Entered  
 Code: 1 = Prehospital (Direct from Scene) notified receiving hospital of patient  
 2 = Prehospital (Direct from Scene) did not notify receiving hospital  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 1 (Integer)

**Triaged by EMS**

Name: P1\_EMS\_YN, P3\_EMS\_YN, P3\_EMS\_YN  
 Definition: Indicates whether the out of hospital triage destination protocol was used to determine patient needed resources of this trauma care facility  
 Calculated/Entered: Entered  
 Code: 1 = Yes  
 2 = No  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 1 (Integer)

**Out of Hospital Triage Rationale**

Name:	TRIAGE_01 – TRIAGE_20
Definition:	Indicates criterion (a) used to triage patient Criteria that may be selected are those in the adult out of hospital trauma triage criteria decision protocol of the EMS Bureau of the IDPH Up to 20 criteria may be chosen (If EMS run sheet unavailable, give best estimate of circumstances of injury).
Calculated/Entered:	Entered
Code:	<ul style="list-style-type: none"><li>1 = GCS &lt;13</li><li>2 = RR &lt;10 or &gt;29</li><li>3 = SBP &lt;90</li><li>4 = HR &gt;120</li><li>5 = Penetration, head/neck/torso/groin/axilla</li><li>6 = Burns &gt;10%, or face/airway/hand/feet/genitalia</li><li>7 = Amputation, proximal to wrist or ankle</li><li>8 = Neck or spinal cord injury with extremity paralysis or paresis</li><li>9 = Flail chest</li><li>10 = Suspected fractures, 2 or more long bones (humerus, femur)</li><li>11 = Suspected pelvic fx</li><li>12 = EMT “high index of suspicion” of abdominal or thoracic injuries</li><li>13 = MV-death in same passenger compartment</li><li>14 = Ejection from vehicle</li><li>15 = MV-extrication</li><li>16 = High speed crash</li><li>17 = MV-rollover</li><li>18 = Pedestrian, thrown, &gt;15 feet or run over</li><li>19 = Pedestrian/vehicle impact &gt;20 mph</li><li>20 = Significant intrusion of passenger compartment</li><li>21 = Motorcycle, ATV, Bicycle &gt;20 mph</li><li>22 = Falls &gt;20ft (Peds = 15ft)</li><li>23 = Age &lt;5 or &gt;60</li><li>24 = Hostile environment, heat/cold</li><li>25 = Medical illness, COPD, CHF, Cardiac</li><li>26 = Pregnancy</li><li>27 = Suspected alcohol/drug intoxication</li><li>28 = EMT “high index of suspicion”</li><li>NA = Not Applicable</li><li>NK/NR = Not known/Not recorded</li></ul>
Range:	1-28
Max Length (Type):	2 (Integer)

If 14 then Ejection distance

Name: EJECT\_FT

Definition: Distance ejected from motor vehicle in feet

Calculated/Entered: Entered

Code: N/A

Range: 1-999, NA, NK/NR

Max Length (Type): 3 (Integer)

If 15 then Extrication time

Name: EXTRICATE\_MINS

Definition: Time of extrication from motor vehicle in minutes

Calculated/Entered: Entered

Code: N/A

Range: 1-999, NA, NK/NR

Max Length (Type): 3 (Integer)

If 16 then Motor Vehicle speed

Name: SPEED

Definition: Speed of motor vehicle in mph

Calculated/Entered: Entered

Code: N/A

Range: 1-999, NA, NK/NR

Max Length (Type): 3 (Integer)

If 22 then fall distance

Name: FALL\_FT

Definition: Distance of fall in feet

Calculated/Entered: Entered

Code: N/A

Range: 1-999, NA, NK/NR

Max Length (Type): 3 (Integer)

### Mode of Arrival (Scene to First Facility)

Name: P1\_MODE, P2\_MODE, P3\_MODE

Definition: Indicates type of out of hospital service program

Calculated/Entered: Entered

Code:

- 1 = Land(Ground) Ambulance
- 2 = Helicopter Ambulance
- 3 = Fixed-wing Ambulance
- 4 = Private/Public Vehicle/Walk-in
- 5 = Police
- 6 = Other
- NA = Not Applicable
- NK/NR = Not known/Not recorded

Range: 1-6

Max Length (Type): 1 (Integer)

### Inter-Facility Transfer

Name: IF\_TRANSFER

Definition: Was the patient transferred to your facility from another trauma care facility?

Calculated/Entered: Entered

Code: 1 = Yes  
2 = No  
NA=Not applicable  
NK/NR=Not known/not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

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# TRANSFERRING FACILITIES

## (Patient not admitted to hospital)

### Institution Number

Name: F1\_ID, F2\_ID, F3\_ID  
Definition: Indicates unique 6-digit number that identifies the trauma care facility.  
Calculated/Entered: Entered  
Code: State specific identifier (Refer to Appendix C)  
Range: N/A  
Max Length (Type): 6 (Integer)

### Arrival Date

Name: F1\_A\_DATE, F2\_A\_DATE, F3\_A\_DATE  
Definition: Indicates date trauma patient arrived at transferring trauma care facility  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Arrival Time

Name: F1\_A\_TIME, F2\_A\_TIME, F3\_A\_TIME  
Definition: Indicates time trauma patient arrived at transferring trauma care facility  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

### Departure Date

Name: F1\_D\_DATE, F2\_D\_DATE, F3\_D\_DATE  
Definition: Indicates date trauma patient discharged from transferring trauma care facility  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Departure Time

Name: F1\_D\_TIME, F2\_D\_TIME, F3\_D\_TIME  
Definition: Indicates time trauma patient discharged from transferring trauma care facility  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)



**Initial Assessment - Paralytic Agents in Effect**

Name: F1\_PAR, F2\_PAR, F3\_PAR  
Definition: Indicates transferring facility status of paralytic agent use when respiratory rate or GCS assessed (Refer to Appendix H).  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Sedated**

Name: F1\_SED, F2\_SED, F3\_SED  
Definition: Indicates transferring facility status of sedation (any drug which may alter their level of consciousness) when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Bagging or Ventilator**

Name: F1\_BAG, F2\_BAG, F3\_BAG  
Definition: Indicates transferring facility status of respiratory ventilation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Intubated**

Name: F1\_INT, F2\_INT, F3\_INT  
Definition: Indicates transferring facility status of intubation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Transferring Facility Systolic Blood Pressure**

Name: F1\_SBP, F2\_SBP, F3\_SBP  
Definition: Indicates transferring facility systolic blood pressure  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-300, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Transferring Facility Pulse Rate**

Name: F1\_HR, F2\_HR, F3\_HR  
Definition: Indicates transferring facility pulse rate  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-299, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Transferring Facility Respiratory Rate**

Name: F1\_RR, F2\_RR, F3\_RR  
Definition: Indicates transferring facility respiratory rate  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-120, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Transferring Facility Glasgow Coma Scale (GCS) Eye**

Name: F1\_GCS\_EO, F2\_GCS\_EO, F3\_GCS\_EO  
Definition: Indicates Glasgow Coma Scale Eye Component at transferring facility.  
Calculated/Entered: Entered  
Code: **Pediatric ( $\leq 2$  years)/Adults**  
1 = No eye movement when assessed  
2 = Opens eyes in response to painful stimulation  
3 = Opens eyes in response to verbal stimulation  
4 = Opens eyes spontaneously  
Range: 1-4, NA, NK/NR  
Max Length (Type): 1 (Integer)

**Transferring Facility GCS Verbal**

Name: F1\_GCS\_VR, F2\_GCS\_VR, F3\_GCS\_VR  
Definition: Indicates Glasgow Coma Scale Verbal Component at transferring facility  
Calculated/Entered: Entered

**Code:** **Pediatric ( $\leq 2$  years)**  
1 = No vocal response  
2 = Inconsolable, agitated  
3 = Inconsistently consolable, moaning  
4 = Cries but is consolable, inappropriate interactions  
5 = Smiles, oriented to sounds, follows objects, interacts  
**Adult**  
1 = No verbal response  
2 = Incomprehensible sounds  
3 = Inappropriate words  
4 = Confused  
5 = Oriented  
**Range:** 1-5, NA, NK/NR  
**Max Length (Type):** 1 (Integer)

### Transferring Facility GCS Motor

**Name:** F1\_GCS\_MR, F2\_GCS\_MR, F3\_GCS\_MR  
**Definition:** Indicates Glasgow Coma Scale Motor Component at transferring facility.  
**Calculated/Entered:** Entered  
**Code:** **Pediatric ( $\leq 2$  years)**  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to pain  
4 = Withdrawal from pain  
5 = Localizing pain  
6 = Appropriate response to stimulation  
**Adult**  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to pain  
4 = Withdrawal from pain  
5 = Localizing pain  
6 = Obeys commands  
**Range:** 1-6, NA, NK/NR  
**Max Length (Type):** 1 (Integer)

### Transferring Facility Glasgow Coma Scale Total

**Name:** F1\_GCS, F2\_GCS, F3\_GCS  
**Definition:** Indicates total Glasgow Coma Scale at transferring trauma care facility  
**Calculated/Entered:** Entered  
**Code:** N/A  
**Range:** 3-15, NA, NK/NR  
**Max Length (Type):** 2 (Integer)

### Transferring Facility GCS Assessment Qualifiers

**Name:** F1\_GCS\_Q, F2\_GCS\_Q, F3\_GCS\_Q  
**Definition:** Documentation of factors potentially affecting the first assessment of GCS within 30 minutes or less of facility arrival  
**Calculated/Entered:** Entered

Code: 1 = Patient Chemically Sedated or Paralyzed  
 2 = Obstruction to the Patient's Eye  
 3 = Patient Intubated  
 4 = Valid GCS: Patient was not sedate, not intubated, and did not have obstruction to the eye

Range: 1-4, NA, NK/NR

Max Length (Type): 1 (Integer)

### Identified Pre-Definitive Care Facility Procedure Codes

Name: TH\_01\_ICD9PR – TH\_44\_ICD9PR

Definition: Indicates procedures performed prior to arrival at definitive care facility, such as what is indicated on the ambulance/flight report or transferring facility record Up to 44 procedure codes may be entered (ICD-9-CM procedure codes).

Calculated/Entered: Entered

Code: For pre-hospital/transferring facility procedures the following codes **shall be used**, the remaining codes are optional:

- 99.29 = Peripheral IV\*
- 38.93 = Central Line\*
- 96.81 = Combitube\*
- 31.18 = Cricothyrotomy (Emergent tracheostomy)\*
- 31.19 = Percutaneous Tracheostomy\*
- 96.01 = Ins, Nasopharyngeal Airway\*
- 96.02 = Ins, Oropharyngeal Airway\*
- 99.60 = CPR\*
- 96.04 = Endotracheal Tube\*
- 99.04 = PRBC Administration
- 88.01 = CT Abdomen/Pelvis
- 87.03 = CT Head
- 88.38 = CT Spine
- 87.41 = CT Chest
- 88.76 = Fast Ultrasound
- 34.04 = Chest Tube
- 57.94 = Indwelling urinary catheter
- 34.09 = Needle Chest Decompression
- 96.07 = Gastric Tube
- 54.25 = DPL
- 02.94 = Halo Traction
- 88.91 = MRI Brain & Brain Stem
- 88.92 = MRI Chest & Myocardium
- 88.93 = MRI Spinal Canal
- 88.95 = MRI Pelvis
- 01.18 = ICP Bolt
- 41.92 = Intraosseous

Range: N/A

Max Length (Type): 7 (String)

## Identified Pre-Definitive Care Facility Procedure Codes

Name: TH\_01\_ICD10PR – TH\_44\_ICD10PR  
 Definition: Indicates procedures performed prior to arrival at definitive care facility, such as what is indicated on the ambulance/flight report or transferring facility record Up to 44 procedure codes may be entered (ICD-10-CM procedure codes).

Calculated: Entered  
 Code: (See below)  
 Range: N/A  
 Max Length (Type): 7 (String)

### Diagnostic and Therapeutic Imaging

Computerized tomographic studies \*

Diagnostic ultrasound (includes FAST) \*

Doppler ultrasound of extremities \*

Angiography

Angioembolization

Echocardiography

Cystogram

IVC filter

Urethrogram

### Cardiovascular

Central venous catheter \*

Pulmonary artery catheter \*

Cardiac output monitoring \*

Open cardiac massage

CPR

### CNS

Insertion of ICP monitor \*

Ventriculostomy \*

### Genitourinary

Ureteric catheterization (i.e. Ureteric stent)

Suprapubic cystostomy

### Transfusion

The following blood products should be captured over first 24 hours after hospital arrival:

Transfusion of red cells \*

Transfusion of platelets \*

Transfusion of plasma \*

In addition to coding the individual blood products listed above assign the appropriate procedure code on patients that receive > 10 units of blood products over first 24 hours following hospital arrival \*

For pediatric patients (age 14 and under), assign the appropriate procedure code on patients that receive 40cc/kg of blood products over first 24 hours following hospital arrival\*

### Respiratory

Insertion of endotracheal tube\*

Continuous mechanical ventilation \*

Chest tube \*

Bronchoscopy \*

Tracheostomy

### Gastrointestinal

Endoscopy (includes gastroscopy,

Cerebral oxygen monitoring \*

**Musculoskeletal**

Soft tissue/bony debridements \*

Closed/Open reduction of fractures

Skeletal and halo traction

Fasciotomy

sigmoidoscopy, colonoscopy)

Gastrostomy/jejunostomy (percutaneous or endoscopic)

Percutaneous (endoscopic)

gastrojejunoscopy

**Other**

Hyperbaric oxygen

Decompression chamber

TPN \*

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**Identified Pre-Definitive Care Facility Procedure Code  
Location**

Name: TH\_01\_LC – TH\_44\_LC  
Definition: Indicates location of procedures performed prior to arrival at this facility  
Up to 44 procedure locations may be entered.  
Calculated/Entered: Entered  
Code: 3 = Transport from Intermediate Facility  
Intermediate Facility 1  
104 = ED  
105 = OR  
106 = ICU  
107 = Floor  
108 = Observation  
109 = Radiology  
110 = Recovery  
111 = Rehabilitation  
112 = Step-Down  
113 = Nuclear Medicine  
114 = Burn Unit  
115 = Minor Surgery Unit  
116 = Special Procedure Unit  
117 = Outpatient Clinic  
118 = Other  
Intermediate Facility 2  
204 = ED  
205 = OR  
206 = ICU  
207 = Floor  
208 = Observation  
209 = Radiology  
210 = Recovery  
211 = Rehabilitation  
212 = Step-Down  
213 = Nuclear Medicine  
214 = Burn Unit  
215 = Minor Surgery Unit  
216 = Special Procedure Unit  
217 = Outpatient Clinic  
218 = Other  
Intermediate Facility 3  
304 = ED  
305 = OR  
306 = ICU  
307 = Floor  
308 = Observation  
309 = Radiology  
310 = Recovery  
311 = Rehabilitation  
312 = Step-Down  
313 = Nuclear Medicine  
314 = Burn Unit  
315 = Minor Surgery Unit

316 = Special Procedure Unit

317 = Outpatient Clinic

318 = Other

NA = Not Applicable

NK/NR = Not known/Not recorded

Range: 3-318

Max Length (Type): 3 (String)

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## Transferring Facility(s) Provider 1

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### Mode of Arrival

Name: F11\_MODE, F21\_MODE, F31\_MODE  
Definition: Indicates type of inter-facility transferring trauma care facility service program  
Calculated/Entered: Entered  
Code: 1 = Land(Ground) Ambulance  
2 = Helicopter Ambulance  
3 = Fixed-wing Ambulance  
4 = Private/Public Vehicle/Walk-in  
5 = Police  
6 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

### Agency Number

Name: F11\_AGEN, F21\_AGEN, F31\_AGEN  
Definition: Indicates transferring trauma care facility service program number  
Calculated/Entered: Entered  
Code: State specific identifier (Refer to Appendix G).  
Range: N/A  
Max Length (Type): 7 (Integer)

### Report Available

Name: F11\_R\_AV, F21\_R\_AV, F31\_R\_AV  
Definition: Indicates whether transferring trauma care facility service report for this run is available at this facility  
Calculated/Entered: Entered  
Code: 1 = Received, complete, legible, in a timely fashion  
2 = Received, complete, legible, not in a timely fashion  
3 = Received, incomplete (all or missing)  
4 = Received, Illegible  
5 = Not received  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-5  
Max Length (Type): 1 (Integer)

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**Report Number**

Name: F11\_R\_NUM, F21\_R\_NUM, F31\_R\_NUM  
Definition: Indicates transferring trauma care facility service report number for this run  
Calculated/Entered: Entered  
Code: Up to 12 characters  
Range: N/A  
Max Length (Type): 12 (String)

**Cardiac Arrest**

Name: F11\_C\_YN, F21\_C\_YN, F31\_C\_YN  
Definition: Indicates whether cardiac arrest occurred while transferring between trauma care facilities  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Paralytic Agents in Effect**

Name: F11\_PAR, F21\_PAR, F31\_PAR  
Definition: Indicates transferring provider 1 status of paralytic agent use when respiratory rate or GCS assessed (Refer to Appendix H).  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Sedated**

Name: F11\_SED, F21\_SED, F31\_SED  
Definition: Indicates transferring provider 1 status of sedation (any drug which may alter their level of consciousness) when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Bagging or Ventilator**

Name: F11\_BAG, F21\_BAG, F31\_BAG  
Definition: Indicates transferring provider 1 status of respiratory ventilation when respiratory rate or GCS assessed.

Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Intubated**

Name: F11\_INT, F21\_INT, F31\_INT  
Definition: Indicates transferring provider 1 status of intubation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Systolic BP**

Name: F11\_SBP, F21\_SBP, F31\_SBP  
Definition: Indicates transferring provider 1 initial systolic pressure.  
Calculated/Entered: Entered  
Range: 0-999  
Max Length (Type): 3 (Integer)

**Initial Assessment - Unassisted Respiratory Rate**

Name: F11\_RR, F21\_RR, F31\_RR  
Definition: Indicates transferring provider 1 initial, unassisted respiratory rate.  
Calculated/Entered: Entered  
Range: 0-99  
Max Length (Type): 2 (Integer)

**Initial ED/Hospital- Glasgow Coma Scale (GCS) – Eye Opening**

Name: F11\_GCS\_EO, F21\_GCS\_EO, F31\_GCS\_EO  
Definition: Indicates transferring provider 1 initial Glasgow Coma Score (Eye).  
Calculated/Entered: Entered  
Code: Eye Opens (Adult/Pediatric (<2 yrs))  
1 = No eye movement when assessed  
2 = Opens eyes in response to painful stimulation  
3 = Opens eyes in response to verbal stimulation  
4 = Opens eyes spontaneously  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**Initial ED/Hospital– GCS – Verbal Response**

Name: F11\_GCS\_VR, F21\_GCS\_VR, F31\_GCS\_VR  
Definition: Indicates transferring provider 1 initial Glasgow Coma Score (Verbal).  
Calculated/Entered: Entered  
Code: Verbal Response-Adults  
1 = No vocal response  
2 = Incomprehensible sounds  
3 = Inappropriate Words  
4 = Confused  
5 = Oriented  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
  
Verbal Response-Pediatric ( $\leq 2$  yrs)  
1 = No vocal response  
2 = Inconsolable, agitated  
3 = Inconsistently consolable, moaning  
4 = Cries but is consolable, inappropriate interactions  
5 = Smiles, oriented to sounds, follows objects, interacts  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-5  
Max Length (Type): 1 (Integer)

**Initial ED/Hospital– GCS – Motor Response**

Name: F11\_GCS\_MR, F21\_GCS\_MR, F31\_GCS\_MR  
Definition: Indicates transferring provider 1 initial Glasgow Coma Score (Motor).  
Calculated/Entered: Entered  
Code: Best Motor Response-Adults  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to Pain  
4 = Withdraw from pain  
5 = Localizes pain  
6 = Obeys Commands  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
  
Best Motor Response-Pediatric ( $\leq 2$  yrs)  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to pain  
4 = Withdrawal from pain  
5 = Localizes pain  
6 = Appropriate response to stimulation  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

**Initial ED/Hospital – GCS - Total**

Name: F11\_GCS\_TT, F21\_GCS\_TT, F31\_GCS\_TT  
Definition: Indicates transferring provider 1 initial Glasgow Coma Score (total).  
of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: N/A  
Range: 3-15, NA, NK/NR  
Max Length (Type): 2 (Integer)

Utilize only if total score is available without component scores.

If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as “AAOx3”, “awake alert and oriented”, or “patient with normal mental status”, interpret this as GCS of 15 IF there is not other contradicting documentation.

Please note that first recorded/hospital vitals do not need to be from the same assessment

**Initial ED/Hospital GCS Assessment Qualifiers**

Name: F11\_GCS\_Q, F21\_GCS\_Q, F31\_GCS\_Q  
Definition: Documentation of factors potentially affecting the transferring provider 1 initial GCS (CHECK ALL THAT APPLY)  
Calculated/Entered: Entered  
Code: 1 = Patient Chemically Sedated or Paralyzed  
2 = Obstruction to the Patient's Eye  
3 = Patient Intubated  
4 = Valid GCS: Patient was not sedate, not intubated, and did not have obstruction to the eye  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

*Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e. ETOH, prescriptions, etc.). If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected. Neuromuscular blockade is typically induced following the administration of an agent like succinylcholine, rocuronium, (cis)atracurium, vecuronium, or pancuronium. See appendix for other common agents used for neuromuscular blockade and sedation and duration of action.*

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## Transferring Facility(s) Provider 2

### Mode of Arrival

Name: F12\_MODE, F22\_MODE, F32\_MODE  
Definition: Indicates transferring trauma care facility service program number  
Calculated/Entered: Entered  
Code: 1 = Land(Ground) Ambulance  
2 = Helicopter Ambulance  
3 = Fixed-wing Ambulance  
4= Private/Public Vehicle/Walk-in  
5= Police  
6 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

### Agency Number

Name: F12\_AGEN, F22\_AGEN, F32\_AGEN  
Definition: Indicates transferring trauma care facility service program number.  
Calculated/Entered: Entered  
Code: State specific identifier (Refer to Appendix G).  
Range: N/A  
Max Length (Type): 7 (Integer)

### Report Available

Name: F12\_R\_AV, F22\_R\_AV, F32\_R\_AV  
Definition: Indicates whether transferring trauma care facility service report for this run is available at this facility.  
Calculated/Entered: Entered  
Code: 1 = Received, complete, legible, in a timely fashion  
2 = Received, complete, legible, not in a timely fashion  
3 = Received, incomplete (all or missing)  
4 = Received, Illegible  
5 = Not received  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-5  
Max Length (Type): 1 (Integer)

### Report Number

Name: F12\_R\_NUM, F22\_R\_NUM, F32\_R\_NUM  
Definition: Indicates transferring trauma care facility service report number for this run.  
Calculated/Entered: Entered  
Code: Up to 12 characters  
Range: N/A  
Max Length (Type): 12 (String)

**Cardiac Arrest**

Name: F12\_C\_YN, F22\_C\_YN, F32\_C\_YN  
Definition: Indicates whether cardiac arrest occurred while before transferring trauma care facility transport arrived at TCF.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Paralytic Agents in Effect**

Name: F12\_PAR, F22\_PAR, F32\_PAR  
Definition: Indicates transferring provider 2 status of paralytic agent use when respiratory rate or GCS assessed (Refer to Appendix H).  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Sedated**

Name: F12\_SED, F22\_SED, F32\_SED  
Definition: Indicates transferring provider 2 status of sedation (any drug which may alter their level of consciousness) when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Bagging or Ventilator**

Name: F12\_BAG, F22\_BAG, F32\_BAG  
Definition: Indicates transferring provider 2 status of respiratory ventilation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Intubated**

Name: F12\_INT, F22\_INT, F32\_INT  
Definition: Indicates transferring provider 2 status of intubation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Initial Assessment - Systolic BP**

Name: F12\_SBP, F22\_SBP, F32\_SBP  
Definition: Indicates transferring provider 2 initial systolic pressure.  
Calculated/Entered: Entered  
Range: 0-999  
Max Length (Type): 3 (Integer)

**Initial Assessment - Unassisted Respiratory Rate**

Name: F12\_RR, F22\_RR, F32\_RR  
Definition: Indicates transferring provider 2 initial, unassisted respiratory rate.  
Calculated/Entered: Entered  
Range: 0-99  
Max Length (Type): 2 (Integer)

**Initial ED/Hospital- Glasgow Coma Scale (GCS) – Eye Opening**

Name: F12\_GCS\_EO, F22\_GCS\_EO, F32\_GCS\_EO  
Definition: Indicates transferring provider 2 initial Glasgow Coma Score (Eye).  
Calculated/Entered: Entered  
Code: Eye Opens (Adult/Pediatric (<2 yrs))  
1 = No eye movement when assessed  
2 = Opens eyes in response to painful stimulation  
3 = Opens eyes in response to verbal stimulation  
4 = Opens eyes spontaneously  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)



**Initial ED/Hospital– GCS – Verbal Response**

Name: F12\_GCS\_VR, F22\_GCS\_VR, F32\_GCS\_VR  
Definition: Indicates transferring provider 2 initial Glasgow Coma Score (Verbal).  
Calculated/Entered: Entered  
Code: Verbal Response-Adults  
1 = No vocal response  
2 = Incomprehensible sounds  
3 = Inappropriate Words  
4 = Confused  
5 = Oriented  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
  
Verbal Response-Pediatric ( $\leq 2$  yrs)  
1 = No vocal response  
2 = Inconsolable, agitated  
3 = Inconsistently consolable, moaning  
4 = Cries but is consolable, inappropriate interactions  
5 = Smiles, oriented to sounds, follows objects, interacts  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-5  
Max Length (Type): 1 (Integer)

**Initial ED/Hospital– GCS – Motor Response**

Name: F12\_GCS\_MR, F22\_GCS\_MR, F32\_GCS\_MR  
Definition: Indicates transferring provider 2 initial Glasgow Coma Score (Motor).  
Calculated/Entered: Entered  
Code: Best Motor Response-Adults  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to Pain  
4 = Withdraw from pain  
5 = Localizes pain  
6 = Obeys Commands  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
  
Best Motor Response-Pediatric ( $\leq 2$  yrs)  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to pain  
4 = Withdrawal from pain  
5 = Localizes pain  
6 = Appropriate response to stimulation  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

**Initial ED/Hospital – GCS - Total**

Name: F12\_GCS\_TT, F22\_GCS\_TT, F32\_GCS\_TT  
Definition: Indicates transferring provider 2 initial Glasgow Coma Score (total).  
of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: N/A  
Range: 3-15, NA, NK/NR  
Max Length (Type): 2 (Integer)

Utilize only if total score is available without component scores.

If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as “AAOx3”, “awake alert and oriented”, or “patient with normal mental status”, interpret this as GCS of 15 IF there is not other contradicting documentation.

Please note that first recorded/hospital vitals do not need to be from the same assessment

**Initial ED/Hospital GCS Assessment Qualifiers**

Name: F12\_GCS\_Q, F22\_GCS\_Q, F32\_GCS\_Q  
Definition: Documentation of factors potentially affecting the transferring provider 2 initial GCS (CHECK ALL THAT APPLY)  
Calculated/Entered: Entered  
Code: 1 = Patient Chemically Sedated or Paralyzed  
2 = Obstruction to the Patient's Eye  
3 = Patient Intubated  
4 = Valid GCS: Patient was not sedate, not intubated, and did not have obstruction to the eye  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

*Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e. ETOH, prescriptions, etc.). If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected. Neuromuscular blockade is typically induced following the administration of an agent like succinylcholine, rocuronium, (cis)atracurium, vecuronium, or pancuronium. See appendix for other common agents used for neuromuscular blockade and sedation and duration of action.*

## Trauma Care Facility (Definitive Care)

Resource, regional or area trauma care facility on all trauma patients;

1. with at least one injury ICD-9 diagnosis code between 800.00 and 959.9, including 940-949 (burns) or Injury diagnoses as defined by ICD-10-CM code S00-S99, T07, T14, T20-T28, T30-T32, and T79.A1-T79.A9 code range.: and:
  - A. who are admissions, to be defined as any patient beyond the Emergency Department, or
  - B. who died after receiving any evaluation or treatment or were dead on arrival, or
  - C. who were transferred into or out of the trauma care facility
- OR
2. the trauma care facility trauma team is activated.

### Trauma Number

Name: TRAUMA\_NUM  
 Definition: Indicates unique, consecutive number assigned by trauma registrar/coordinator for each trauma patient admitted to this emergency department or transferred to this trauma care facility  
 May not be assigned to another trauma patient  
 Calculated/Entered: Entered  
 Code: Unique 8 digit number assigned.  
 Range: N/A  
 Max Length (Type): 8 (Integer)

### Download Candidate

Name: SYSTEM\_YN  
 Definition: Indicates whether patient meets trauma patient eligibility, as stated in Definition section If they meet eligibility, patient is downloaded from trauma care facility into State Trauma Registry.  
 Calculated/Entered: Entered  
 Code: 1 = Yes  
 2 = No  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: N/A  
 Max Length (Type): 1 (Integer)

### Source of Trauma System Inclusion Designation

Name: ENTRY\_SYS  
 Definition: Indicates information source used to identify patient as a trauma patient meriting a trauma service response by this reporting trauma care facility and/or inclusion in the hospital trauma register.  
 Calculated/Entered: Entered  
 Code: 1 = Prehospital (Direct from Scene)
 

- a. Patient arrived at this reporting trauma care facility by EMS; transported directly from scene or another location
- b. Trauma service responded to patient based on prehospital information prior to patient arrival.

 Note: Does NOT include patients arriving at reporting trauma care facility by private vehicle.

- 2 = Trauma Team Activation (At This Hospital)  
 aDirect arrival, non EMS (e.g., police, private vehicle, etc).  
 bTrauma service responded to patient based on this reporting trauma

care facility's ED information after patient arrival.

- 3 = Transfer from Another Acute Care Facility  
 aTrauma service responded to patient based on transferring trauma care facility information prior to patient arrival at this reporting facility.  
 4 = Transfer to Trauma Service from Another Service within this hospital  
 aTrauma service responded to patient based on information from another service within this reporting trauma care facility.  
 5 = Retrospective Review  
 aTrauma service did NOT respond to patient but the patient met the inclusion criteria to be entered into this reporting trauma care facility registry (single system injuries even for transfer patients or require specialized care from Orthopedics, Neurosurgery, etc.).

NA = Not Applicable

NK/NR = Not known/Not recorded

1-5

Max Length (Type): 1 (Integer)

### Emergency Department Arrival Date

Name: EDA\_DATE

Definition: Indicates date of arrival at this trauma care facility emergency or other department.

Calculated/Entered: Entered

Code: YYYY-MM-DD

Range: 1990-01-01 to 2030-01-01

Max Length (Type): 10 (Date)

### Emergency Department Arrival Time

Name: EDA\_TIME

Definition: Indicates time of arrival at this trauma care facility.

Calculated/Entered: Entered

Code: HH:MM (Military Time)

Range: N/A

Max Length: 5 (Time)

### Medical Record Number

Name: MR\_NUM

Definition: Indicates the medical record number of patient at this trauma care facility.

Calculated/Entered: Entered

Code: Any set of up to 20 characters

Range: N/A

Max Length (Type): 20 (String)

### Patient Access to This Facility – Through which Department

Name: ED\_ACCESS (Do we need other choices such as: Clinic?)

Definition: Indicates which department in this facility patient was first admitted

Calculated/Entered: Entered

Code: 1 = Emergency Department  
 2 = Trauma Department –Independent from ED (rare in Iowa)  
 3 = Direct Admit – not ED or Trauma Department  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: 1-3

Max Length (Type): 1 (Integer)

### Trauma Response Called/Requested

Name: ED\_STATUS

Definition: Indicates level of trauma team activation called as part of the trauma service response of this trauma care facility emergency department for this trauma patient.

Calculated/Entered: Entered

Code: 1 = Trauma Team Activation – Partial team  
 areduced team or lowered level alert.  
 bnot applicable to TCFs without two-tiered system.  
 2 = Trauma Team Activation – Full team  
 4 = Trauma Consult  
 5 = Re-hospitalization after discharge  
 6 = Non-Trauma Service (i.e., TCFs where trauma team NOT involved)  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: 1-6

Max Length (Type): 1 (Integer)

### Admitting Service

Name: ADM\_SERV

Definition: If patient was admitted to the hospital, enter the service to which the patient was admitted (NS=Nonsurgical service)

Calculated/Entered: Entered

Code: 1= General Surgery  
 2 = Trauma Surgery  
 3 = Neurosurgery  
 4 = Burn Surgery  
 5 = Pediatric Surgery  
 6 = Orthopaedics  
 7 = Thoracic-Cardiovascular  
 8 = Vascular  
 9 = Plastic Surgery  
 10=ENT  
 11=Ophthalmology  
 12=Oral Surgery  
 13=Urology  
 14=Family Medicine/Practice (NS)  
 15=Internal Medicine (NS)  
 16=Pulmonary Medicine (NS)  
 17=Neurology (NS)  
 18=Cardiology (NS)  
 19=Pediatrics (NS)  
 20=Geriatrics (NS)

21=GI (NS)  
 22=Renal (NS)  
 23=Infectious Diseases (NS)  
 24=Psychiatry (NS)  
 25=Hospitalist Service (NS)  
 26=Other  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: 1-26  
 Max Length (Type): 2 (Integer)

### Admitting Service-Non Surgical

Name: ADM\_SERV\_NS  
 Definition: If patient was admitted to the hospital under a nonsurgical service, indicate if they received a consult from one or more of the following.

Calculated/Entered: Entered  
 Code: 1 = General/Trauma Surgeons  
 2 = Neurosurgery  
 3 = Burn Surgery  
 4 = Pediatric Surgery  
 5 = Orthopaedics/Podiatry  
 6 = Thoracic-Cardiovascular  
 7 = Vascular  
 8 = Plastic Surgery  
 9 = ENT  
 10=Ophthalmology  
 11=Oral Surgery  
 12=Urology  
 13=Ob/Gyn  
 14=Other  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: 1-14  
 Max Length (Type): 2 (Integer)

### ED Discharge Date

Name: EDD\_DATE  
 Definition: Indicates discharge date from this trauma care facility emergency department.

Calculated/Entered: Entered  
 Code: YYYY-MM-DD  
 Range: 1990-01-01 to 2030-01-01  
 Max Length (Type): 10 (Date)

### ED Discharge Time

Name: EDD\_TIME  
 Definition: Indicates discharge time from this trauma care facility emergency department.

Calculated/Entered: Entered  
 Code: HH:MM (Military Time)  
 Range: N/A

Max Length: 5 (Time)

### ED Disposition

Name: EDD\_DISP

Definition: Indicates disposition from emergency department

Calculated/Entered: Entered

Code: NTDS Categories

1 = Floor Bed (general admission)

2 = Observation unit (unit that provides < 24 hour stays)

3 = Telemetry/step-down unit (less acuity than ICU)

4 = Home with services

5 = Died/Expired

6 = Other (jail, institutional care, mental health, etc.)

7 = Operating Room

8 = Intensive Care Unit (ICU)

9 = Home without services

10 = Left against medical advice

11 = Transferred to another hospital

NA = Not Applicable (If patient is directly admitted to the hospital)

-If ED Disposition is 4, 5 then hospital discharge date, time and disposition should be NA

NK/NR = Not known/Not recorded

Range: 1-11

Max Length (Type): 2 (Integer)

### Signs of Life

Name: ED\_SOL

Definition: Indication of whether patient arrived to ED/Hospital with signs of life.

Calculated/Entered: Entered

Code: 1 = Arrived with NO signs of life

2 = Arrived with signs of life

NA = Not Applicable

NK/NR = Not known/Not recorded

Range: 1-2

Max Length (Type): 1 (Integer)

-A patient with no signs of life is defined as having none of the following: organized EKG activity, pupillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure This usually implies the patient was brought to the ED with CPR in progress.

**ED Initial Assessment – Paralytic Agents in Effect**

Name: E1\_PAR  
Definition: Indicates initial emergency department status of paralytic agent use when respiratory rate or GCS assessed (Refer to Appendix H).  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**ED Initial Assessment - Sedated**

Name: E1\_SED  
Definition: Indicates initial emergency department status of sedation (any drug which may alter their level of consciousness) when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**ED Initial Assessment – Bagging or Ventilator**

Name: E1\_BAG  
Definition: Indicates initial emergency department status of respiratory ventilation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)

**ED Initial Assessment – Intubated**

Name: E1\_INT  
Definition: Indicates initial emergency department status of intubation when respiratory rate or GCS assessed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
I = Not Applicable  
U = Unknown  
Range: 1-2  
Max Length (Type): 1 (Integer)



**Initial ED/Hospital Systolic BP**

Name: E1\_SBP  
Definition: Indicates first recorded systolic blood pressure in the ED/hospital within 30 minutes or less of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-300, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital Pulse Rate**

Name: E1\_HR  
Definition: Indicates first recorded pulse rate in the ED (palpated or auscultated) within 30 minutes or less of ED/hospital arrival (expressed as a number per minute).  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-299, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital Respiratory Rate**

Name: E1\_RR  
Definition: Indicates first recorded respiratory rate in the ED/hospital within 30 minutes or less of ED/hospital arrival (expressed as a number per minute).  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-120, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital Respiratory Assistance**

Name: E1\_ASST  
Definition: Determination of respiratory assistance associated with the initial ED/hospital respiratory rate within 30 minutes or less of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: 1 = Unassisted Respiratory Rate  
2 = Assisted Respiratory Rate  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)  
Only completed if a value is provided for "Initial ED/Hospital Respiratory Rate".  
Respiratory Assistance is defined as mechanical and/or external support of respiration.  
Please note that first recorded/hospital vitals do not need to be from the same assessment

**Initial ED/Hospital Assessment – Oxygen Saturation**

Name: E1\_SAO2  
Definition: Indicates initial emergency department oxygen saturation (percent)  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-100, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital Assessment – Supplemental Oxygen**

Name: E1\_SUPPO2  
Definition: Determination of the presence of supplemental oxygen during assessment of initial ED/Hospital oxygen saturation level within 30 minutes or less of ED/Hospital arrival  
Calculated/Entered: Entered  
Code: 1 = No Supplemental Oxygen  
2 = Supplemental Oxygen  
NA = Not Applicable  
NK/NR = Not known/Not recorded 1-2  
Range: 1-2  
Max Length (Type): 1 (Integer)  
-Only completed if a value is provided for "Initial ED/Hospital Oxygen Saturation"  
-Please note that first recorded/hospital vitals do not need to be from the same assessment

**Initial ED/Hospital Assessment – Base Deficit**

Name: E1\_BASE  
Definition: Indicates initial emergency department oxygen base deficit (mmol/l)  
Calculated/Entered: Entered  
Code: -30 – +30 mmol/l  
Range: -30 – +30 mmol/l, NA, NK/NR  
Max Length (Type): 3 (String)

**Initial Carboxyhemoglobin**

Name: E1\_COHB  
Definition: Indicates initial emergency department carboxyhemoglobin level.  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-100, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital Assessment – Temperature**

Name: E1\_TEMP  
Definition: Indicates first recorded temperature (in degrees Celsius (centigrade)) in the ED/hospital within 30 minutes or less of ED/hospital arrival  
Calculated/Entered: Entered  
Code: N/A  
Range: 28 – 48 Celsius, 82 – 120 Fahrenheit, NA, NK/NR  
Max Length (Type): 3 (Decimal)

**Initial ED/Hospital Assessment – Temperature Unit**

Name: E1\_TEMPU  
Definition: Indicates initial emergency department/hospital temperature type (F or C)  
Calculated/Entered: Entered  
Code: F or C  
Range: F,C, NA, NK/NR  
Max Length (Type): 1 (String)

**Initial ED/Hospital Assessment – Temperature Route**

Name: E1\_TEMPR  
Definition: Indicates initial emergency department/hospital temperature measurement route  
Calculated/Entered: Entered  
Code:  
    1. Tympanic  
    2. Oral  
    3. Axillary  
    4. Rectal  
    5. Foley  
    6. Other  
    NA = Not Applicable  
    NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

**ED Initial Assessment – Weight**

Name: E1\_WGT  
Definition: Indicates initial emergency department weight (lb or (kg--NTDS) Measured or estimated baseline weight  
Calculated/Entered: Entered  
Code: N/A  
Range: 0 - 907, NA, NK/NR  
Max Length (Type): 3 (Integer)

**ED Initial Assessment – Weight Measurement Unit**

Name: E1\_WGTU  
Definition: Indicates initial emergency department weight type (lb or kg)  
Calculated/Entered: Entered  
Code: P or K  
Range: P, K, NA, NK/NR  
Max Length (Type): 1 (String)

**ED Initial Assessment – Height**

Name: E1\_HGT  
Definition: Indicates first recorded height upon emergency department/hospital arrival (inches or (cm--NTDS)  
Calculated/Entered: Entered  
Code: N/A  
Range: 0 - 244, NA, NK/NR  
Max Length (Type): 3 (Integer)

**ED Initial Assessment – Height Measurement Unit**

Name: E1\_HGTU  
Definition: Indicates initial emergency department height type (inches or **cm**)  
Calculated/Entered: Entered  
Code: I or C  
Range: I, C, NA, NK/NR  
Max Length (Type): 1 (String)

**ED Initial Assessment – BMI**

Name: E1\_BMI  
Definition: Indicates initial emergency department/hospital BMI  
Calculated/Entered: Calculated  
Code: N/A  
Range: 0 - 190, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Initial ED/Hospital– Glasgow Coma Scale (GCS) – Eye Opening**

Name: E1\_GCS\_EO  
Definition: Indicates first recorded Glasgow Coma Score (Eye) in the emergency department/hospital within 30 minutes or less of ED/hospital arrival.  
Calculated/Entered: Entered

**Code:** Eye Opens (Adult/Pediatric (<2 yrs))  
1 = No eye movement when assessed  
2 = Opens eyes in response to painful stimulation  
3 = Opens eyes in response to verbal stimulation  
4 = Opens eyes spontaneously  
NA = Not Applicable  
NK/NR = Not known/Not recorded

**Range:** 1-4  
**Max Length (Type):** 1 (Integer)

**Initial ED/Hospital– GCS – Verbal Response**

**Name:** E1\_GCS\_VR  
**Definition:** Indicates first recorded Glasgow Coma Score (Verbal) within 30 minutes or less of ED/hospital arrival.  
**Calculated/Entered:** Entered  
**Code:** Verbal Response-Adults  
1 = No vocal response  
2 = Incomprehensible sounds  
3 = Inappropriate Words  
4 = Confused  
5 = Oriented  
NA = Not Applicable  
NK/NR = Not known/Not recorded

Verbal Response-Pediatric (<2 yrs)  
1 = No vocal response  
2 = Inconsolable, agitated  
3 = Inconsistently consolable, moaning  
4 = Cries but is consolable, inappropriate interactions  
5 = Smiles, oriented to sounds, follows objects, interacts  
NA = Not Applicable  
NK/NR = Not known/Not recorded

**Range:** 1-5  
**Max Length (Type):** 1 (Integer)

**Initial ED/Hospital– GCS – Motor Response**

**Name:** E1\_GCS\_MR  
**Definition:** Indicates first recorded Glasgow Coma Score (Motor) within 30 minutes or less of ED/hospital arrival  
**Calculated/Entered:** Entered  
**Code:** Best Motor Response-Adults  
1 = No motor response  
2 = Extension to pain  
3 = Flexion to Pain  
4 = Withdraw from pain  
5 = Localizes pain  
6 = Obeys Commands  
NA = Not Applicable  
NK/NR = Not known/Not recorded

Best Motor Response-Pediatric (<2 yrs)  
1 = No motor response

2 = Extension to pain  
 3 = Flexion to pain  
 4 = Withdrawal from pain  
 5 = Localizes pain  
 6 = Appropriate response to stimulation  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: 1-6  
 Max Length (Type): 1 (Integer)

### Initial ED/Hospital – GCS - Total

Name: E1\_GCS\_TT  
 Definition: Indicates first recorded Glasgow Coma Score (total) within 30 minutes or less of ED/hospital arrival.  
 Calculated/Entered: Entered  
 Code: N/A  
 Range: 3-15, NA, NK/NR  
 Max Length (Type): 2 (Integer)

Utilize only if total score is available without component scores.

If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as “AAOx3”, “awake alert and oriented”, or “patient with normal mental status”, interpret this as GCS of 15 IF there is not other contradicting documentation.

Please note that first recorded/hospital vitals do not need to be from the same assessment

### Initial ED/Hospital GCS Assessment Qualifiers

Name: E1\_GCS\_Q  
 Definition: Documentation of factors potentially affecting the first assessment of GCS within 30 minutes or less of facility arrival (CHECK ALL THAT APPLY)  
 Calculated/Entered: Entered  
 Code:  
   1 = Patient Chemically Sedated or Paralyzed  
   2 = Obstruction to the Patient's Eye  
   3 = Patient Intubated  
   4 = Valid GCS: Patient was not sedate, not intubated, and did not have obstruction to the eye  
   NA = Not Applicable  
   NK/NR = Not known/Not recorded  
 Range: 1-4  
 Max Length (Type): 1 (Integer)

*Identifies treatments given to the patient that may affect the first assessment of GCS. This field does not apply to self-medications the patient may administer (i.e. ETOH, prescriptions, etc.). If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected. Neuromuscular blockade is typically induced following the administration of an agent like succinylcholine, rocuronium, (cis)atracurium, vecuronium, or pancuronium. See appendix for other common agents used for neuromuscular blockade and sedation and duration of action.*

**Blood Alcohol Tested**

Name: ETOH\_TEST  
Definition: Indicates blood alcohol was tested.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Blood Alcohol Results**

Name: ETOH\_RES  
Definition: Indicates highest blood alcohol level (If patient transferred between trauma care facilities, may use previous hospital's reported value—thus, eliminate duplicate labs).  
Calculated/Entered: Entered  
Code: N/A  
Range: 0-999, NA, NK/NR  
Max Length (Type): 3 (Integer)

**Drug Screen Performed**

Name: DRUG\_TEST  
Definition: Indicates drug screen performed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Drug Screen Results**

Name: DRUG\_01 – DRUG\_10  
Definition: Indicates drug screen positive for non-prescribed drugs (If patient transferred between trauma care facilities, may use previous hospital's reported value—thus, eliminate duplicate labs) Up to 10 drugs may be chosen.  
Calculated/Entered: Entered  
Code: 1 = Amphetamines  
2 = Barbiturates  
3 = Benzodiazepines  
4 = Cocaine  
5 = Marijuana  
6 = Opiates  
7 = PCP (Phencyclidine)  
8 = Other  
9 = Negative  
NA = Not Applicable

NK/NR = Not known/Not recorded

Range: 1-9

Max Length (Type): 1 (Integer)

**Drug Screen Results – If Other**

Name: DRUG\_O

Definition: Indicates drug screen results if Other.

Calculated/Entered: Entered

Code: Up to 50 characters in length.

Range: N/A

Max Length (Type): 50 (String)

DRAFT



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**Emergency Physician Call Date**

Name: ED91\_C\_DATE  
Definition: Indicates date Emergency Physician was called to the ED.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Emergency Physician Call Time**

Name: ED91\_C\_TIME  
Definition: Indicates time Emergency Physician was called to the ED.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**Emergency Physician Arrival Date**

Name: ED91\_A\_DATE  
Definition: Indicates date of Emergency Physician ED arrival.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Emergency Physician Arrival Time**

Name: ED91\_A\_TIME  
Definition: Indicates time of Emergency Physician arrival to the ED.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**Emergency Physician Level**

Name: ED91\_LEVEL  
Definition: Indicates level of Emergency Physician.  
Calculated/Entered: Entered  
Code: 1 = Attending  
2 = Resident  
3 = Physician Extender  
4 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**First Trauma Surgeon Call Date**

Name: ED92\_C\_DATE  
Definition: Indicates date trauma surgeon was called to the ED.

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Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**First Trauma Surgeon Call Time**

Name: ED92\_C\_TIME  
Definition: Indicates time trauma surgeon was called to the ED.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**First Trauma Surgeon Arrival Date**

Name: ED92\_A\_DATE  
Definition: Indicates date of trauma surgeon ED arrival.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**First Trauma Surgeon Arrival Time**

Name: ED92\_A\_TH  
Definition: Indicates time of trauma surgeon arrival to the ED.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**First Trauma Surgeon Level**

Name: ED92\_LEVEL  
Definition: Indicates level of trauma surgeon.  
Calculated/Entered: Entered  
Code: 1 = Attending  
2 = Resident  
3 = Physician Extender (LIP)  
4 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-4  
Max Length (Type): 1 (Integer)

**Procedure Codes**

Name: DF\_01\_ICD9PR – DF\_88\_ICD9PR

Definition: Indicates procedure performed at any location within this trauma care facility Up to 88 procedure codes may be entered (NTDB definition: Operative and essential procedures conducted during hospital stay. Operative and essential procedures are those that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or complications). (ICD-9-CM procedure codes).

Things to Consider:

- The list of procedures below should be used as a guide to non-operative procedures that should be provided to the state and NTDB.
- Code the field as Not Applicable if patient did not have procedures.
- Capture all procedures performed in the operating room
- Capture all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications.
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, capture only the first event If there is no asterisk, capture each event even if there is more than one.
- Note that the hospital may capture additional procedures

Calculated/Entered: Entered

Code: For this reporting trauma care facility procedures, the following codes in asterisks **shall be used**; more extensive codes may be used depending upon patient care

99.29 = Peripheral IV\*  
 38.93 = Central Line\*  
 96.81 = Combitube\*  
 31.18 = Cricothyrotomy (Emergent tracheostomy)\*  
 31.19 = Percutaneous Tracheostomy\*  
 96.01 = Ins, Nasopharyngeal Airway\*  
 96.02 = Ins, Oropharyngeal Airway\*  
 99.60 = CPR\*  
 96.04 = Endotracheal Tube\*  
 99.04 = PRBC Administration  
 88.01 = CT Abdomen/Pelvis  
 87.03 = CT Head  
 88.38 = CT Spine  
 87.41 = CT Chest  
 88.76 = Fast Ultrasound  
 34.04 = Chest Tube  
 57.94 = Indwelling urinary catheter  
 34.09 = Needle Chest Decompression  
 96.07 = Gastric Tube  
 54.25 = DPL  
 02.94 = Halo Traction  
 88.91 = MRI Brain & Brain Stem  
 88.92 = MRI Chest & Myocardium  
 88.94 = MRI Upper/Lower Extremity/Musculoskeletal  
 88.93 = MRI Spinal Canal

88.95 = MRI Pelvis, Prostate, Bladder  
 88.97 = MRI Eye, Face, Neck, specified site NEC  
 01.18 = ICP Bolt  
 41.92 = Intraosseous

Range: N/A  
 Max Length (Type): 7 (String)

Name: DF\_01\_ICD10PR – DF\_88\_ICD10PR

Definition: Indicates procedure performed at any location within this trauma care facility  
 Up to 88 procedure codes may be entered (NTDB definition: Operative and essential procedures conducted during hospital stay. Operative and essential procedures are those that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or complications). (ICD-10-CM procedure codes).

Calculated: Entered  
 Code: (See below)  
 Range: N/A  
 Max Length (Type): 6 (String)

#### Things to Consider:

- The list of procedures below should be used as a guide to non-operative procedures that should be provided to the state and NTDB.
- Code the field as Not Applicable if patient did not have procedures.
- Capture all procedures performed in the operating room
- Capture all procedures in the ED, ICU, ward, or radiology department that were essential to the diagnosis, stabilization, or treatment of the patient's specific injuries or their complications.
- Procedures with an asterisk have the potential to be performed multiple times during one episode of hospitalization. In this case, capture only the first event. If there is no asterisk, capture each event even if there is more than one.
- Note that the hospital may capture additional procedures

### Diagnostic and Therapeutic Imaging

Computerized tomographic studies \*

Diagnostic ultrasound (includes FAST) \*

Doppler ultrasound of extremities \*

Angiography

Angioembolization

Echocardiography

Cystogram

IVC filter

Urethrogram

### Genitourinary

Ureteric catheterization (i.e. Ureteric stent)

Suprapubic cystostomy

### Transfusion

The following blood products should be captured over first 24 hours after hospital arrival:

Transfusion of red cells \*

Transfusion of platelets \*

Transfusion of plasma \*

In addition to coding the individual blood products listed above assign the appropriate procedure code on patients

that receive > 10 units of blood products over first 24 hours following hospital arrival \*

For pediatric patients (age 14 and under), assign the appropriate procedure code on patients that receive 40cc/kg of blood products over first 24 hours following hospital arrival\*

### **Cardiovascular**

Central venous catheter \*  
Pulmonary artery catheter \*  
Cardiac output monitoring \*  
Open cardiac massage  
CPR

### **CNS**

Insertion of ICP monitor \*  
Ventriculostomy \*

Cerebral oxygen monitoring \*

### **Musculoskeletal**

Soft tissue/bony debridements \*  
Closed/Open reduction of fractures  
Skeletal and halo traction  
Fasciotomy

Range: N/A  
Max Length (Type): 7 (String)

### **Respiratory**

Insertion of endotracheal tube\*  
Continuous mechanical ventilation \*  
Chest tube \*  
Bronchoscopy \*  
Tracheostomy

### **Gastrointestinal**

Endoscopy (includes gastroscopy, sigmoidoscopy, colonoscopy)  
Gastrostomy/jejunostomy (percutaneous or endoscopic)  
Percutaneous (endoscopic) gastrojejunoscopy

### **Other**

Hyperbaric oxygen  
Decompression chamber  
TPN \*

**Procedure Code Location**

Name: DF\_01\_LC – DF\_88\_LC  
Definition: Indicates location of each procedure Up to 88 procedure locations may be entered.  
Calculated/Entered: Entered  
Code: 1 = ED2 = OR  
3 = ICU  
4 = Floor  
5 = Observation  
6 = Radiology  
7 = Recovery  
8 = Rehabilitation  
9 = Step-Down  
10 = Nuclear Medicine  
11 = Burn Unit  
12 = Minor Surgery Unit  
13 = Special Procedure Unit  
14 = Outpatient Clinic  
15 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-15  
Max Length (Type): 2 (Integer)

**Procedure Date**

Name: DF\_01\_DATE – DF\_88\_DATE  
Definition: Indicates date procedure performed at any location Up to 88 procedure dates may be entered.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Procedure Time**

Name: DF\_01\_TIME – DF\_88\_TIME  
Definition: Indicates hour procedure performed at any location in military time Up to 88 procedure times may be entered.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

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**ICU Days**

Name: ICU\_DAYS

Definition: Indicates total number of days in intensive care (including all episodes).

Calculated/Entered: Entered

Code: N/A

Range: 1-400, NA, NK/NR

Max Length (Type): 3 (Integer)

- Recorded in full day increments with any partial day listed as a full day
- If a patient is admitted and discharged on the same date, the LOS is one day

**Ventilation Days**

Name: VENT\_DAYS

Definition: Indicates the total number of patient days spent on a mechanical ventilator (excluding time in the OR).

Calculated/Entered: Entered

Code: N/A

Range: 1-400, NA, NK/NR

Max Length (Type): 3 (Integer)

- Recorded in full day increments with any partial day listed as a full day
- Field allows for multiple “start” and “stop” dates and calculates total days spent on a mechanical ventilator. If a patient begins and ends mechanical ventilation on the same date, the total ventilator days is one day.
- Excludes mechanical ventilation time associated only with OR procedures.
- Non-invasive means of ventilatory support (CPAP or BIPAP) should not be considered in the calculation of ventilator days.

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**Anatomical Diagnoses – Injury Narrative**

Name: INJ\_TEXT  
Definition: Text description of patient's injuries which are then used by Tri-Code to determine ISS/AAAM/ICD-9/TRISS Codes and Scores The automatically calculated codes/scores can be overridden manually to improve accuracy.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 1,750 (Memo)

**AIS Version**

Name: AIS\_VER  
Definition: Indicates which revision of AIS system is used to calculate AIS  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: 1 = AIS 80  
2 = AIS 85  
3 = AIS 90  
4 = AIS 95  
5 = AIS 98  
6 = AIS 05  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

**ICD9 Injury Code**

Name: ICD9\_01 – ICD9\_27  
Definition: Indicates ICD-9 injury codes requiring treatment at this trauma care facility.  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: Valid ICD-9 Injury Diagnosis Code  
Range: N/A  
Max Length (Type): 6 (String)

**ICD10 Injury Code**

Name: ICD10\_01 – ICD10\_27  
Definition: Indicates ICD-10 injury codes requiring treatment at this trauma care facility.  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: Valid ICD-10 Injury Diagnosis Code  
Range: N/A  
Max Length (Type): 8 (String)



**AIS Score**

Name: AIS\_01 – AIS\_27  
Definition: Valid AIS score for each injury  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: 1 = Minor injury  
2 = Moderate injury  
3 = Serious injury  
4 = Severe injury  
5 = Critical injury  
6 = Maximum injury (virtually unsurvivable)  
9 = Not possible to assign  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6, 9  
Max Length (Type): 1 (Integer)

**ISS Body Region**

Name: ISSBR\_01 – ISSBR\_27  
Definition: ISS body region codes for each injury  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: 1 = Head or neck  
2 = Face  
3 = Chest  
4 = Abdominal or pelvic contents  
5 = Extremities or pelvic girdle  
6 = External  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-6  
Max Length (Type): 1 (Integer)

**AAAM (PREDOT) Code for each Injury**

Name: PREDOT\_01 – PREDOT\_27  
Definition: AAAM codes for injuries requiring treatment at this trauma care facility.  
Is the 6 digits preceding the decimal point in an associated AIS code.  
Calculated/Entered: Calculated, but can be manually overridden to improve accuracy.  
Code: Valid AAAM Injury Diagnosis Code.  
Range: 000000-999999  
Max Length (Type): 6 (String)

**TRISS**

Name: TRISS  
Definition: Indicates patient probability of survival  
Calculated/Entered: Calculated  
Code: N/A  
Range: 0.001-1.000  
Max Length (Type): 5 (String)

**Note: Components used to derive probability of survival score include, RTS (initial “At-this-facility” vitals; GCS, SBP, and RR), injury type (blunt or penetrating), ISS, and age.**

### **Injury Severity Score (ISS)**

Name: ISS  
Definition: Indicates Injury Severity Score (ISS) determined on this trauma patient.  
Calculated/Entered: Calculated  
Code: N/A  
Range: 1-75, NA, NK/NR  
Max Length (Type): 2 (Integer)

### **Revised Trauma Score (RTS)**

Definition: Indicates Revised Trauma Score (RTS) determined on this trauma patient.  
Calculated/Entered: Calculated  
Code: N/A  
Range: 0-7.84, NA, NK/NR  
Max Length (Type): 4 (String)

**Anatomical Diagnoses - Burns**

Name: Lund-Browder Chart

Definition: Describes a burn injury by extent and depth

Calculated/Entered: Both

Area	Max	% 2nd	% 3rd	Total	ICD Codes*	
					% 2nd	% 3rd
Head						
Neck						
Anterior trunk						
Posterior trunk						
Right buttock						
Left buttock						
Genitalia						
Right upper arm						
Left upper arm						
Right lower arm						
Left lower arm						

\* International Classification of Diseases Ninth Revision (ICD-9-CM codes)

**Anatomical Diagnoses - Burns**

Area	Max	% 2nd	% 3rd	Total	ICD Codes	
					% 2nd	% 3rd
Right hand						
Left hand						
Right thigh						
Left thigh						
Right leg						
Left leg						
Right foot						
Left foot						
<b>Total BSA</b>						
		2nd	3rd	2nd + 3rd	BSA ICD Code	
<b>Burn P(s)</b>						

**Co-Morbidities**

Name: COMORB\_01 – COMORB\_15  
Definition: Pre-existing co-morbid factors present before patient arrival at this facility (Refer to Appendix I).  
Calculated/Entered: Entered  
Code: ICD-9 N-Codes and V-Codes or ICD-10-CM codes  
Range: N/A  
Max Length (Type): 6 (String)

Examples:

Alcoholism  
Ascites within 30 days  
Bleeding disorder  
Currently receiving chemotherapy for cancer  
Congenital anomalies  
Congestive heart failure  
Current smoker  
Chronic renal failure  
CVA/residual neurological deficit  
Diabetes mellitus  
Disseminated cancer  
Advanced directive limiting care  
Esophageal varices  
Functionally dependent health status  
History of angina within 30 days  
History of myocardial infarction  
History of PVD  
Hypertension requiring medication  
Prematurity  
Obesity  
Respiratory disease  
Steroid use  
Cirrhosis  
Dementia  
Major psychiatric illness  
Drug abuse or dependence  
Pre-hospital cardiac arrest with resuscitative efforts by healthcare provider  
Pregnancy  
Other

**Discharge Date**

Name: DIS\_DATE  
Definition: Indicates date discharged from trauma care facility (Leave blank if discharged from TCF ED).  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

**Discharge Time**

Name: DIS\_TIME  
Definition: Indicates discharge time from this trauma care facility.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**Discharge Status**

Name: DIS\_STATUS  
Definition: Indicates discharged status from trauma care facility.  
Calculated/Entered: Entered  
Code: 1= Alive  
2= Dead

Range: 1-2  
Max Length (Type): 1 (Integer)

**Discharge to**

Name: DIS\_TO  
Definition: Indicates disposition on discharge from this reporting trauma care facility.  
Calculated/Entered: Entered

Code:

- 1 = Discharged/Transferred to a short-term general hospital for inpatient care
- 2 = Discharged/Transferred to an Intermediate Care Facility (ICF)
- 3 = Discharged/Transferred to home under care of organized home health service
- 4 = Left against medical advice or discontinued care
- 5 = Expired
- 6 = Discharged home with no home services
- 7 = Discharged/Transferred to Skilled Nursing Facility
- 8 = Discharged/Transferred to hospice care
- 9 = Discharged/Transferred to another type of rehabilitation or long-term care facility(Retired 2014)
- 10 = Discharged/Transferred to court/law enforcement.
- 11 = Discharged/Transferred to inpatient rehab or designated unit
- 12 = Discharged/Transferred to Long Term Care Hospital (LTCH)

13 = Discharged/transferred to a psychiatric hospital  
or psychiatric distinct part unit of a hospital

14 = Discharged/Transferred to another type of  
institution not defined elsewhere

NA = Not Applicable

NK/NR = Not known/Not recorded

**Additional considerations:**

- Field value = 6 (Home) refers to the patient's current place of residence (e.g., prison, child protective services, etc.)
- Field values based upon UB-04 disposition coding
- Disposition to any other non-medical facility should be coded as 6
- -Disposition to any other medical facility should be coded as 14
- Could have some terms in a glossary
- If ED Discharge Disposition = 5 (Died) then Hospital Discharge Disposition should be 'NA'
- If ED Discharge Disposition = 4, 6, 9, 10, or 11 then Hospital Disposition must be 'NA'

Range: 01-12

Max Length (Type): 2 (Integer)

**Discharge to – Other, List**

Name: DIS\_TO\_O

Definition: Narrative description to be used when 'Other' is chosen answer for 'Discharge to' variable

Calculated/Entered: Entered

Code: Narrative up to 50 characters.

Range: N/A

Max Length (Type): 50 (String)

**Discharge to – Facility**

Name: DIS\_TO\_F

Definition: Indicates facility number, including inpatient transfer and outpatient referral.

Calculated/Entered: Entered

Code: State Specific Identifier

Range: N/A

Max Length (Type): 6 (String)

**Discharge to – Facility, Other, List**

Name: DIS\_TO\_F\_O

Definition: Narrative description to be used when certain options are chosen answer for Discharge To –Facility variable

Calculated/Entered: Entered

Code: Narrative up to 50 characters.

Range: N/A

Max Length (Type): 50 (String)

**[NOT SURE WHAT OUTCOME/DISABILITY SCALE WE WILL USE – FORMATS INCOMPLETE FOR DRS AND IIS/IDS]****DISABILITY RATING SCALE:**

Disability Rating Scale ratings to be completed at discharge.

**A. EYE OPENING [DRS\_EO]:**

(0) Spontaneous

0-SPONTANEOUS: eyes open with sleep/wake rhythms indicating active arousal mechanisms, does not assume awareness.

1-TO SPEECH AND/OR SENSORY STIMULATION: a response to any verbal approach, whether spoken or shouted, not necessarily the command to open the eyes. Also, response to touch, mild pressure.

2-TO PAIN: tested by a painful stimulus.

3-NONE: no eye opening even to painful stimulation.

(1) To Speech

(2) To Pain

(3) None

**B. COMMUNICATION ABILITY [DRS\_VR]:**

(0) Oriented

0-ORIENTED: implies awareness of self and the environment. Patient able to tell you a) who he is; b) where he is; c) why he is there; d) year; e) season; f) month; g) day; h) time of day.

1-CONFUSED: attention can be held and patient responds to questions but responses are delayed and/or indicate varying degrees of disorientation and confusion.

2-INAPPROPRIATE: intelligible articulation but speech is used only in an exclamatory or random way (such as shouting and swearing); no sustained communication exchange is possible.

3-INCOMPREHENSIBLE: moaning, groaning or sounds without recognizable words, no consistent communication signs.

4-NONE: no sounds or communications signs from patient.

(1) Confused

(2) Inappropriate

(3) Incomprehensible

(4) None

**C. MOTOR RESPONSE [DRS\_MR]:**

0-OBEYING: obeying command to move finger on best side. If no response or not suitable, try another command such as "move lips," "blink eyes," etc. Do not include grasp or other reflex responses.

1-LOCALIZING: a painful stimulus at more than one site causes limb to move (even slightly) in an attempt to remove it. It is a deliberate motor act to move away from or remove the source of noxious stimulation. If there is doubt as to whether withdrawal or localization has occurred after 3 or 4 painful stimulations, rate as localization.

2-WITHDRAWING: any generalized movement away from a noxious stimulus that is more than a simple reflex response.

3-FLEXING: painful stimulation results in either flexion at the elbow, rapid withdrawal with abduction of the shoulder or a slow withdrawal with adduction of the shoulder. If there is confusion between flexing and withdrawing, then use pinprick on hands.

4-EXTENDING: painful stimulation results in extension of the limb.

5-NONE: no response can be elicited Usually associated with hypotonia Exclude spinal transection as an explanation of lack of response; be satisfied that an adequate stimulus has been applied.

- (0) Obeying
- (1) Localizing
- (2) Withdrawing
- (3) Flexing
- (4) Extending
- (5) None

#### **D. FEEDING (COGNITIVE ABILITY ONLY; DRS\_F)**

- (0.0) Complete
- (1.0) Partial
- (2.0) Minimal
- (3.0) None

Does the patient show awareness of how and when to perform this activity? Ignore motor disabilities that interfere with carrying out this function (This is rated under Level of Functioning described below.) 0-COMPLETE: continuously shows awareness that he knows how to feed and can convey unambiguous information that he knows when this activity should occur 1-PARTIAL: intermittently shows awareness that he knows how to feed and/or can intermittently convey reasonably clearly information that he knows when the activity should occur 2-MINIMAL: shows questionable or infrequent awareness that he knows in a primitive way how to feed and/or shows infrequently by certain signs, sounds, or activities that he is vaguely aware when the activity should occur.

3-NONE: shows virtually no awareness at any time that he knows how to feed and cannot convey information by signs, sounds, or activity that he knows when the activity should occur.

#### **E. TOILETING (COGNITIVE ABILITY ONLY; DRS\_T)**

Does the patient show awareness of how and when to perform this activity? Ignore motor disabilities that interfere with carrying out this function (This is rated under Level of Functioning described below.) Rate best response for toileting based on bowel and bladder behavior

0-COMPLETE: continuously shows awareness that he knows how to toilet and can convey unambiguous information that he knows when this activity should occur.

1-PARTIAL: intermittently shows awareness that he knows how to toilet and/or can intermittently convey reasonably clearly information that he knows when the activity should occur.

2-MINIMAL: shows questionable or infrequent awareness that he knows in a primitive way how to toilet and/or shows infrequently by certain signs, sounds, or activities that he is vaguely aware when the activity should occur.

3-NONE: shows virtually no awareness at any time that he knows how to toilet and cannot convey information by signs, sounds, or activity that he knows when the activity should occur.

- (0.0) Complete
- (1.0) Partial
- (2.0) Minimal
- (3.0) None

#### **F. GROOMING (COGNITIVE ABILITY ONLY; DRS\_G)**

Does the patient show awareness of how and when to perform this activity? Ignore motor disabilities that interfere with carrying out this function (This is rated under Level



of Functioning described below.) Grooming refers to bathing, washing, brushing of teeth, shaving, combing or brushing of hair and dressing.

0-COMPLETE: continuously shows awareness that he knows how to groom self and can convey unambiguous information that he knows when this activity should occur.

1-PARTIAL: intermittently shows awareness that he knows how to groom self and/or can intermittently convey reasonably clearly information that he knows when the activity should occur.

2-MINIMAL: shows questionable or infrequent awareness that he knows in a primitive way how to groom self and/or shows infrequently by certain signs, sounds, or activities that he is vaguely aware when the activity should occur.

3-NONE: shows virtually no awareness at any time that he knows how to groom self and cannot convey information by signs, sounds, or activity that he knows when the activity should occur.

(0.0) Complete

(1.0) Partial

(2.0) Minimal

(3.0) None

#### **G. LEVEL OF FUNCTIONING (PHYSICAL, MENTAL, EMOTIONAL OR SOCIAL FUNCTION; DRS\_LF)**

0-COMpletely INDEPENDENT: able to live as he wishes, requiring no restriction due to physical, mental, emotional or social problems.

1-INDEPENDENT IN SPECIAL ENVIRONMENT: capable of functioning independently when needed requirements are met (mechanical aids)

2-MILDLY DEPENDENT: able to care for most of own needs but requires limited assistance due to physical, cognitive and/or emotional problems (e.g., needs non-resident helper).

3-MODERATELY DEPENDENT: able to care for self partially but needs another person at all times(person in home)

4-MARKEDLY DEPENDENT: needs help with all major activities and the assistance of another person at all times.

5-TOTALLY DEPENDENT: not able to assist in own care and requires 24-hour nursing care.

(0.0) Completely Independent

(1.0) Independent in special environment

(2.0) Mildly Dependent-Limited assistance (non-resid - helper)

(3.0) Moderately Dependent-moderate assist (person in home)

(4.0) markedly Dependent-assist all major activities, all times

(5.0) Totally Dependent-24 hour nursing care.

#### **H."EMPLOYABILITY"(AS A FULL TIME WORKER, HOMEMAKER, OR STUDENT; DRS\_E)**

0-NOT RESTRICTED: can compete in the open market for a relatively wide range of jobs commensurate with existing skills; or can initiate, plan execute and assume responsibilities associated with homemaking; or can understand and carry out most age relevant school assignments.

1-SELECTED JOBS, COMPETITIVE: can compete in a limited job market for a relatively narrow range of jobs because of limitations of the type described above and/or because of some physical limitations; or can initiate, plan, execute and assume many but not all responsibilities associated with homemaking; or can understand and carry out many but not all school assignments.

2-SHELTERED WORKSHOP, NON-COMPETITIVE: cannot compete successfully in a job market because of limitations described above and/or because of moderate or

severe physical limitations; or cannot without major assistance initiate, plan, execute and assume responsibilities for homemaking; or cannot understand and carry out even relatively simple school assignments without assistance.

3-NOT EMPLOYABLE: completely unemployable because of extreme psychosocial limitations of the type described above, or completely unable to initiate, plan, execute and assume any responsibilities associated with homemaking; or cannot understand or carry out any school assignments.

(0.0) Not Restricted

(1.0) Selected jobs, competitive

(2.0) Sheltered workshop, Non-competitive

(3.0) Not Employable

The psychosocial adaptability or "employability" item takes into account overall cognitive and physical ability to be an employee, homemaker or student.

This determination should take into account considerations such as the following:

1Able to understand, remember and follow instructions.

2Can plan and carry out tasks at least at the level of an office clerk or in simple routine, repetitive industrial situation or can do school assignments.

3Ability to remain oriented, relevant and appropriate in work and other psychosocial situations.

4Ability to get to and from work or shopping centers using private or public transportation effectively.

5Ability to deal with number concepts.

6Ability to make purchases and handle simple money exchange problems

7Ability to keep track of time and appointments

**OR**

### **Injury Impairment Scale (IIS)**

Overview: The Injury Impairment Scale (IIS) and Injury Disability Scale (IDS) was developed to evaluate the impact of traumatic injury on a patient. The Injury Disability Scale can be estimated from the IIS based on the person's available resources and underlying conditions. The authors are from Rochester General Hospital (New York) and the General Motors Research Laboratories.

IIS parameters:

(1) mobility and dexterity [IIS\_MD]

(2) cognitive and psychological [IIS\_CP]

(3) cosmetic disfigurement [IIS\_CD]

(4) sensory [IIS\_S]

(5) pain [IIS\_P]

(6) sexual and reproduction [IIS\_SR]

### **Injury Disability Scale (IDS)**

IDS Scale

0=no disability (able to be fully employed and pursue full recreational activities)

1=minor (self support with reduced recreational activities)

2=moderate (self support with no recreational activity)

3=serious (independent living; may or may not require some assistance with activities of daily living; may be able to work part-time)

4=severe (living at home with assistance of an aid less than 4 hours per day or requires some assistance with shopping meal preparation or medications)

5=very severe (full care at home with assistance more than 4 hours a day or institutional care providing some assistance with activities of daily living)

6=extreme (requires institutional care with an external life support system)

### Organs/Tissue Donation Requested

Name: ORG\_REQ\_YN  
 Definition: Indicates whether organ donation was requested.  
 Calculated/Entered: Entered  
 Code: 1 = Yes  
 2 = No  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 2 (Integer)

### Organs/Tissue Donation Request Granted

Name: ORG\_APP\_YN  
 Definition: Indicates whether organ/tissue donation request was granted.  
 Calculated/Entered: Entered  
 Code: 1 = Yes  
 2 = No  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded  
 Range: 1-2  
 Max Length (Type): 2 (Integer)

Name: ORG\_01 – ORG\_10  
 Definition: Indicates permission was granted to donate tissue/organsVs actual organs harvested?  
 Calculated/Entered: Entered  
 Code: 0 = None  
 1 = All  
 2 = Multiple – NOS  
 3 = Adrenal glands -?  
 4 = Bone  
 5 = Bone marrow -?  
 6 = Cartilage - ?  
 7 = Cornea  
 8 = Dura mater -?  
 9 = Fascialata---? needed  
 10 = Heart  
 11 = Lungs  
 12 = Valves  
 13 = Kidneys  
 14 = Liver  
 15 = Nerves -?  
 16 = Pancreas  
 17 = Skin  
 18 = Tendons -?  
 19 = Ineligible to Donate

20= Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 0-20  
Max Length (Type): 2 (Integer)

**Autopsy Performed?**

Name: AUTOP\_YN  
Definition: Indicates whether autopsy was performed.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

**Autopsy Report Number**

Name: AUTOP\_NUM  
Definition: Indicates site and identification number of autopsy.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 15 (String)

**Payer Sources (Primary and Secondary)**

Name: PAY\_01 – PAY\_05  
Definition: Indicates primary source of payment to this trauma care facility for this visit.  
Calculated/Entered: Entered  
Code: 1 = Medicaid  
2 = Not Billed (for any reason)  
3 = Self Pay  
4 = Private/Commercial Insurance  
5 = No Fault Automobile  
6 = Medicare  
7 = Other Government  
8 = Workers Compensation  
9 = Blue Cross/Blue Shield  
10 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-10  
Max Length (Type): 2 (Integer)

**Payer – If Other**

Name: PAY\_O  
Definition: Indicates source of payment to this trauma care facility for this visit, if other.  
Calculated/Entered: Entered  
Code: Up to 50 characters.  
Range: N/A

Max Length (Type): 50 (String)

### Total Hospital Charges

Name: H\_CHRG  
Definition: Indicates total charges by this trauma care facility for this visit.  
Calculated/Entered: Entered  
Range: N/A  
Max Length (Type): 9 (Integer)

### Hospital Complications

Name: H\_COMP\_01-H\_COMP\_25  
Definition: Any medical complication that occurred during the patient's stay at your hospital.  
Calculated/Entered: Entered  
Code:  
1 = Other  
4 = Acute kidney injury  
5 = Acute lung injury/Acute respiratory distress syndrome (ARDS)  
8 = Cardiac arrest with resuscitative efforts by healthcare provider  
11 = Decubitus ulcer  
12 = Deep surgical site infection  
13 = Drug or alcohol withdrawal syndrome  
14 = Deep Vein Thrombosis (DVT) / thrombophlebitis  
15 = Extremity compartment syndrome  
16 = Graft/prosthesis/flap failure  
18 = Myocardial infarction  
19 = Organ/space surgical site infection  
20 = Pneumonia  
21 = Pulmonary embolism  
22 = Stroke / CVA  
23 = Superficial surgical site infection  
25 = Unplanned intubation  
27 = Urinary tract infection  
28 = Catheter-related blood stream infection  
29 = Osteomyelitis  
30 = Unplanned return to the OR  
31 = Unplanned return to the ICU  
32 = Severe sepsis  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-32  
Max length: 2 (Integer)

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**Trauma Quality Improvement Program (Measures for Processes of Care)**


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**Highest GCS Total**

Name: HIGH\_GCS

Definition: Highest total GCS within 24 hours of ED/Hospital Arrival on patients with at least one injury in AIS head region.

Calculated/Entered: Entered

Range: 3-15, NA, NK/NR

Max Length: 2 (Integer)

Code:

- a. Refers to highest total GCS within 24 hours after ED Hospital/Arrival to index hospital, where index hospital is the hospital abstracting the data.
- b. Requires review of all data sources to obtain the highest GCS total. In many cases, the highest
- c. GCS may occur after ED discharge.
- d. If patient is intubated then the GCS Verbal score is equal to 1.
- e. Best obtained when sedatives or paralytics are withheld as part of sedation holiday.
- f. If a patient does not have a numeric GCS recorded, but there is documentation related to their level of consciousness such as "AAOx3," "awake alert and oriented," or "patient with normal mental status," interpret this as GCS of 15 IF there is not other contradicting documentation.

**Highest GCS Motor**

Name: HIGH\_GCS\_MR

Definition: Highest motor GCS within 24 hours of ED/Hospital Arrival on patients with at least one injury in AIS head region.

Calculated/Entered: Entered

Range: 1-6, NA, NK/NR

Max Length: 2 (Integer)

Code: Best Motor Response-Adults

- 1 = No motor response
- 2 = Extension to pain
- 3 = Flexion to Pain
- 4 = Withdraw from pain
- 5 = Localizes pain
- 6 = Obeys Commands
- NA = Not Applicable
- NK/NR = Not known/Not recorded

Best Motor Response-Pediatric ( $\leq 2$  yrs)

- 1 = No motor response
- 2 = Extension to pain
- 3 = Flexion to pain
- 4 = Withdrawal from pain
- 5 = Localizes pain
- 6 = Appropriate response to stimulation
- NA = Not Applicable
- NK/NR = Not known/Not recorded

- a. Refers to highest GCS motor within 24 hours after ED Hospital/Arrival to index hospital, where index hospital is the hospital abstracting the data.
-

- b. Requires review of all data sources to obtain the highest GCS motor score. In many cases, the highest GCS may occur after ED discharge.
- c. Best obtained when sedatives or paralytics are withheld as part of sedation holiday.
- d. If a patient does not have a numeric GCS recorded, but written documentation closely (or directly) relates to verbiage describing a specific level of functioning within the GCS scale, the appropriate numeric score may be listed. E.g. the chart indicates: "patient withdraws from a painful stimulus," a Motor GCS of 4 may be recorded, IF there is no other contradicting documentation.

### **GCS Assessment Qualifier Component of Highest GCS Total**

Name:	HIGH_GCS_Q
Definition:	Documentation of factors potentially affecting the highest GCS within 24 hours of ED/Hospital arrival (CHECK ALL THAT APPLY)
Calculated/Entered:	Entered
Code:	<p>1 = Patient Chemically Sedated or Paralyzed</p> <p>2 = Obstruction to the Patient's Eye</p> <p>3 = Patient Intubated</p> <p>4 = Valid GCS: Patient was not sedate, not intubated, and did not have obstruction to the eye</p> <p>NA = Not Applicable</p> <p>NK/NR = Not known/Not recorded</p>
Range:	1-4
Max Length (Type):	1 (Integer)
	<p>Refers to highest GCS assessment qualifier score after arrival to definitive hospital.</p> <p>Requires review of all data sources to obtain the highest GCS motor score which might occur after the ED phase of care.</p> <p>Identifies medical treatments given to the patient that may affect the best assessment of GCS. This field does not apply to self-medication the patient may have administered (i.e. ETOH, prescriptions, etc.).</p> <p>Must be the assessment qualifier of the Highest GCS Total.</p> <p>If an intubated patient has recently received an agent that results in neuromuscular blockade such that a motor or eye response is not possible, then the patient should be considered to have an exam that is not reflective of their neurologic status and the chemical sedation modifier should be selected.</p> <p>Neuromuscular blockade is typically induced following the administration of agents like succinylcholine, rocuronium, (cis)atracurium, vecuronium, or pancuronium. See Appendix for examples of agents and sedatives typically seen.</p> <p>Each of these agents has a slightly different duration of action, so their effect on the GCS depends on when they were given.</p>

### **Cerebral Monitor**

Name:	<b>ICP_MONITOR</b>
Definition:	Indicate all cerebral monitors that were placed, including any of the

following: ventriculostomy, subarachnoid bolt, camino bolt, external ventricular drain (EVD), licox monitor, jugular venous bulb.(CHECK ALL THAT APPLY)

Calculated/Entered: Entered

Code: 1 = Intraventricular drain/catheter (e.g.ventriculostomy, external ventricular drain)  
 2 = Intraparenchymal pressure monitor (e.gCamino bolt, subarachnoid bolt, intraparenchymal catheter)  
 3 = Intraparenchymal oxygen monitor (e.gLicox)  
 4 = Jugular venous bulb  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: N/A

Max Length: 1 (Integer)

### Cerebral Monitor Date

Name: ICPM\_DATE

Definition: Date of first cerebral monitor placement.

Calculated/Entered: Entered

Code: YYYY-MM-DD

Range: 1990-01-01 to 2030-01-01

Max Length (Type): 10 (Date)

### Cerebral Monitor Time

Name: ICPM\_TIME

Definition: Time of first cerebral monitor placement.

Calculated/Entered: Entered

Code: HH:MM (Military Time)

Range: N/A

Max Length: 5 (Time)

### Venous Thromboembolism Prophylaxis Type

Name: VTE\_TYPE

Definition: Type of first dose of VTE prophylaxis administered to patient

Calculated/Entered: Entered

Code: 1 = Heparin  
 6 = LMWH (Dalteparin, Enoxaparin, etc.)  
 7 = Direct Thrombin Inhibitor (Dabigatran, etc.)  
 8 = Oral Xa Inhibitor (Rivaroxaban, etc.)  
 9 = Coumadin  
 5 = None  
 10 = Other  
 NA = Not Applicable  
 NK/NR = Not known/Not recorded

Range: N/A

Max Length: 2 (Integer)



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**Venous Thromboembolism Prophylaxis Date**

Name: **VTE\_DATE**  
Definition: Date of administration to patient of first prophylactic dose of heparin or other anticoagulants.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length: 10 (Date)

**Venous Thromboembolism Prophylaxis Time**

Name: **VTE\_TIME**  
Definition: Time of administration to patient of first prophylactic dose of heparin or other anticoagulants.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

**Blood Product Transfusions within first 4 hours after ED/Hospital arrival**

Name: **BLOODTRANSFUSION\_4HRS**  
Definition: Volume of packed red blood cells transfused (units or CCs) within first 4 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-40000, NA, NK/NR  
Max Length: 5 (Integer)

**Blood Product Transfusions within first 24 hours after ED/Hospital arrival**

Name: **BLOODTRANSFUSION\_24HRS**  
Definition: Volume of packed red blood cells transfused (units or CCs) within first 24 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-40000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Blood Measurement**

Name: **BLOODTRANSFUSION\_MEASURE**  
Definition: The measurement used to document the patient's blood transfusion (units, CCs [mls])  
Calculated/Entered: Entered  
Code: 1 = Units  
2 = CCs (MLs)  
Range: 1-2, NA, NK/NR  
Max Length: 2 (Integer)

**Transfusion Blood Conversion**

Name: **BLOODTRANSFUSION\_CONVERSION**  
Definition: The quantity of CCs [MLs] constituting a 'unit' for blood transfusions at your hospital

Calculated/Entered: Entered  
Range: 0-1000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Plasma within first 4 hours after ED/Hospital arrival**

Name: PLASMATRANSFUSION\_4HRS  
Definition: Volume of fresh frozen or thawed plasma (units or CCs) transfused within first 4 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-40000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Plasma 24 hours after ED/Hospital arrival**

Name: PLASMATRANSFUSION\_24HRS  
Definition: Volume of fresh or thawed plasma (units or CCs) transfused within first 24 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-60000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Plasma Measurement**

Name: PLASMATRANSFUSION\_MEASURE  
Definition: The measurement used to document the patient's plasma transfusion (units, CCs [mls])  
Calculated/Entered: Entered  
Code: 1 = Units  
2 = CCs (MLs)  
Range: 1-2, NA, NK/NR  
Max Length: 2 (Integer)

**Transfusion Plasma Conversion**

Name: PLASMATRANSFUSION\_CONVERSION  
Definition: The quantity of CCs [MLs] constituting a 'unit' for plasma transfusions at your hospital  
Calculated/Entered: Entered  
Range: 0-1000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Platelets within first 4 hours after ED/Hospital arrival**

Name: PLATELETTRANSFUSION\_4HRS  
Definition: Volume of platelets (units or CCs) transfused within first 4 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-40000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Platelets 24 hours after ED/Hospital arrival**

Name: PLATELETTRANSFUSION\_24HRS  
Definition: Volume of platelets (units or CCs) transfused within first 24 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-60000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Platelets Measurement**

Name: PLATELETTRANSFUSION\_MEASURE  
Definition: The measurement used to document the patient's platelets transfusion (units, CCs [mls])  
Calculated/Entered: Entered  
Code: 1 = Units  
2 = CCs (MLs)  
Range: 1-2, NA, NK/NR  
Max Length: 2 (Integer)

**Transfusion Platelets Conversion**

Name: PLATELETTRANSFUSION\_CONVERSION  
Definition: The quantity of CCs [MLs] constituting a 'unit' for platelet transfusions at your hospital  
Calculated/Entered: Entered  
Range: 0-1000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Cryoprecipitate within first 4 hours after ED/Hospital arrival**

Name: CRYOPRECIPITATE\_4HRS  
Definition: Volume of solution enriched with clotting factors (units or CCs) transfused within first 4 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-40000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Cryoprecipitate 24 hours after ED/Hospital arrival**

Name: CRYOPRECIPITATE\_24HRS  
Definition: Volume of solution enriched with clotting factors (units or CCs) transfused within first 24 hours after ED/hospital arrival.  
Calculated/Entered: Entered  
Range: 0-60000, NA, NK/NR  
Max Length: 5 (Integer)

**Transfusion Cryoprecipitate Measurement**

Name: CRYOPRECIPITATE\_MEASURE  
Definition: The measurement used to document the patient's cryoprecipitate transfusion (units, CCs [mls])  
Calculated/Entered: Entered  
Code: 1 = Units

Range: 2 = CCs (MLs)  
1-2, NA, NK/NR  
Max Length: 2 (Integer)

### Transfusion Cryoprecipitate Conversion

Name: CRYOPRECIPITATE\_CONVERSION  
Definition: The quantity of CCs [MLs] constituting a 'unit' for cryoprecipitate transfusions at your hospital  
Calculated/Entered: Entered  
Range: 0-1000, NA, NK/NR  
Max Length: 5 (Integer)

### Lowest ED SBP

Name: E1\_SBP\_LOW  
Definition: Lowest sustained (>5 min) systolic blood pressure measured within the first hour of ED/Hospital arrival  
Calculated/Entered: Entered  
Code: 0-300, NA, NK/NR  
Range: 0-300  
Max Length: 3 (Integer)

### Angiography

Name: ANGIOGRAPHY  
Definition: First interventional angiogram with or without embolization within first 48 hours of ED/Hospital arrival.  
Calculated/Entered: Entered  
Code: 1 = None  
2 = Angiogram only  
3 = Angiogram with embolization  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-3  
Max Length: 1 (Integer)

**Note: Excludes CTA**

### Embolization Site

Name: EMBOLIZATION\_SITE  
Definition: Organ / site of embolization for hemorrhage control (CHECK ALL THAT APPLY).  
Calculated/Entered: Entered  
Code: 1 = Liver  
2 = Spleen  
3 = Kidneys  
4 = Pelvic (iliac, gluteal, obturator)  
5 = Retroperitoneum (lumbar, sacral)  
6 = Peripheral vascular (neck, extremities)  
7 = Aorta (thoracic or abdominal)  
8 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-3

Max Length: 1 (Integer)

### Angiography Date

Name: ANGIOGRAPHY\_DATE  
Definition: Date of first angiogram with or without embolization.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Angiography Time

Name: ANGIOGRAPHY\_TIME  
Definition: Time of first angiogram with or without embolization.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

### Surgery For Hemorrhage Control Type

Name: HEMCTRLSURG\_TYPE  
Definition: First type of surgery for hemorrhage control within the first 24 hours of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: 1 = None  
2 = Laparotomy  
3 = Thoracotomy  
4 = Sternotomy  
5 = Extremity (peripheral vascular)  
6 = Neck  
7 = Mangled extremity/traumatic amputation  
8 = Other  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-3  
Max Length: 1 (Integer)

### Hemorrhage Control Surgery Date

Name: HEMCTRLSURG\_DATE  
Definition: Date of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Hemorrhage Control Surgery Time

Name: HEMCTRLSURG\_TIME  
Definition: Time of first surgery for hemorrhage control within first 24 hours of ED/hospital arrival.

Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
Range: N/A  
Max Length: 5 (Time)

### Withdrawal of Care

Name: WDRL\_YN  
Definition: Care was withdrawn based on a decision to either remove or withhold further life sustaining intervention This decision must be documented in the medical record and is often, but not always associated with a discussion with the legal next of kin.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length (Type): 1 (Integer)

### Withdrawal of Care Date

Name: WDRL\_Date  
Definition: The date care was withdrawn.  
Calculated/Entered: Entered  
Code: YYYY-MM-DD  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1990-01-01 to 2030-01-01  
Max Length (Type): 10 (Date)

### Withdrawal of Care Time

Name: WDRL\_Time  
Definition: The time care was withdrawn.  
Calculated/Entered: Entered  
Code: HH:MM (Military Time)  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: N/A  
Max Length (Type): 5 (Time)

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## New filter variables option

### Abdominal Penetrating Wound Treated Non-operatively

Name: FILTER\_1  
Definition: Was a penetrating abdominal wound treated non-operatively.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### Cervical Spine Injury not Indicated on Admission

Name: FILTER\_2  
Definition: Was a cervical spine injury not indicated on admission.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### Experienced Cardiopulmonary Arrest

Name: FILTER\_3  
Definition: Did patient experience cardiopulmonary arrest.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### Platelets Given with < 8 Units of Blood in First 24 Hours

Name: FILTER\_4  
Definition: Were platelets given with < 8 units of blood in first 24 hours.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable

NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Readmitted Following Emergency Department Discharge**

Name: FILTER\_5  
Definition: Was patient readmitted following emergency department discharge.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Reintubated within 48 Hours of Intentional Extubation**

Name: FILTER\_6  
Definition: Was patient reintubated within 48 hours of intentional extubation.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Unplanned Return to Operating Room for Same Procedure**

Name: FILTER\_7  
Definition: Unplanned return to operating room for same procedure.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Unanticipated/Unplanned Operation Performed**

Name: FILTER\_8  
Definition: Unanticipated/Unplanned operation performed.  
Calculated/Entered: Entered  
Code: 1 = Yes



2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Transferred from Floor to Intensive Care or Step Down**

Name: FILTER\_9  
Definition: Was patient transferred from floor to intensive care or step down.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Transported but not Identified as Trauma Pt by Prehosp Prov**

Name: FILTER\_10  
Definition: Was patient transported but not identified as trauma patient by prehospital provider.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

### **Open Joint Laceration Treat 8 Hours After Arrival**

Name: FILTER\_11  
Definition: Did patient have an open joint laceration treated 8 hours after arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**MD Documentation Deficiency**

Name: FILTER\_12  
Definition: Was there an MD documentation deficiency.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Laparotomy Performed More Than 2 Hours After Arrival**

Name: FILTER\_13  
Definition: Was a laparotomy performed more than 2 hours after arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Failure to Call Trauma Activation**

Name: FILTER\_14  
Definition: Failure to Call Trauma Activation.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Inadequate Fluid Resuscitation**

Name: FILTER\_15  
Definition: Inadequate Fluid Resuscitation.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Absence of Serial Neurological Doc for CNS patient?**

Name: FILTER\_16  
Definition: Absence of Serial Neurological Doc for CNS patient?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Absence of Hourly Vital Signs Doc in ED?**

Name: FILTER\_17  
Definition: Absence of Hourly Vital Signs Doc in ED?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Abdominal Surgery >24 Hour After Arrival**

Name: FILTER\_18  
Definition: Abdominal Surgery >24 Hour After Arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Thoracic Surgery >24 Hour After Arrival**

Name: FILTER\_19  
Definition: Thoracic Surgery >24 Hour After Arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Vascular Surgery >24 Hour After Arrival**

Name: FILTER\_20  
Definition: Vascular Surgery >24 Hour After Arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Cranial Surgery >24 Hour After Arrival**

Name: FILTER\_21  
Definition: Cranial Surgery >24 Hour After Arrival.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Question Raised on Focused Chart Review**

Name: FILTER\_22  
Definition: Question Raised on Focused Chart Review.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Incident Reported to Risk Management**

Name: FILTER\_23  
Definition: Incident Reported to Risk Management.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

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**Patient Complaint**

Name: FILTER\_24  
Definition: Patient Complaint.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Provider Complaint**

Name: FILTER\_25  
Definition: Provider Complaint.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Admitted to Service Other Than Trauma**

Name: FILTER\_26  
Definition: Admitted to Service Other Than Trauma.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Radiology, Arrival/Response Times Missing**

Name: FILTER\_27  
Definition: Radiology, Arrival/Response Times Missing.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**CT Study, Delay in Arrival/Response >= 2 hours**

Name: FILTER\_28  
Definition: CT Study, Delay in Arrival/Response >= 2 hours.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**CT Study, Arrival/Response Times Missing**

Name: FILTER\_29  
Definition: CT Study, Arrival/Response Times Missing.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Assisting Surgeon, Delay in Arrival/Response**

Name: FILTER\_30  
Definition: Assisting Surgeon, Delay in Arrival/Response.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Assisting Surgeon, Arrival/Response Times Missing**

Name: FILTER\_31  
Definition: Assisting Surgeon, Arrival/Response Times Missing.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Consulting Physician, Delay in Arrival/Response**

Name: FILTER\_32  
Definition: Consulting Physician, Delay in Arrival/Response.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Consulting Physician, Arrival/Response Times Missing**

Name: FILTER\_33  
Definition: Consulting Physician, Arrival/Response Times Missing.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Airway Status not Documented**

Name: FILTER\_34  
Definition: Airway Status not Documented.  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Comatose Patient Arrived in ED without Airway Management Done?**

Name: FILTER\_35  
Definition: Comatose Patient Arrived in ED without Airway Management Done?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

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**Comatose Patient Leave ED without Airway Management Done?**

Name: FILTER\_36  
Definition: Comatose Patient Leave ED without Airway Management Done?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Admitted 120 Minutes After Arrival**

Name: FILTER\_37  
Definition: Admitted 120 Minutes After Arrival?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Delay in Discharge**

Name: FILTER\_38  
Definition: Delay in Discharge?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Anesthesiologist, Delay in Arrival/Response**

Name: FILTER\_39  
Definition: Anesthesiologist, Delay in Arrival/Response?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)



**Anesthesiologist, Arrival/Response Times Missing**

Name: FILTER\_40  
Definition: Anesthesiologist, Arrival/Response Times Missing?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Neurosurgeon, Delay in Arrival/Response**

Name: FILTER\_41  
Definition: Neurosurgeon, Delay in Arrival/Response?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Neurosurgeon, Arrival/Response Times Missing**

Name: FILTER\_42  
Definition: Neurosurgeon, Arrival/Response Times Missing?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Trauma Surgeon, Delay in Arrival/Response**

Name: FILTER\_43  
Definition: Trauma Surgeon, Delay in Arrival/Response?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

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**Trauma Surgeon, Arrival/Response Times Missing**

Name: FILTER\_44  
Definition: Trauma Surgeon, Arrival/Response Times Missing?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Discharged with Moderate to Severe New Disability**

Name: FILTER\_45  
Definition: Discharged with Moderate to Severe New Disability?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Glasgow Coma Scale not Documented**

Name: FILTER\_46  
Definition: Glasgow Coma Scale not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Systolic Pressure not Documented**

Name: FILTER\_47  
Definition: Glasgow Coma Scale not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Respiratory Rate not Documented**

Name: FILTER\_48  
Definition: Respiratory Rate not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Serum Alcohol not Documented**

Name: FILTER\_49  
Definition: Serum Alcohol not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Drug Screen not Documented**

Name: FILTER\_50  
Definition: Drug Screen not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Emergency Department Time not Documented**

Name: FILTER\_51  
Definition: Emergency Department Time not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Trauma Response not Documented**

Name: FILTER\_52  
Definition: Trauma Response not Documented?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Survival Probability not Assigned**

Name: FILTER\_53  
Definition: Survival Probability not Assigned?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Intracranial Hematoma Operated 4 Hours After Arrival**

Name: FILTER\_54  
Definition: Intracranial Hematoma Operated 4 Hours After Arrival?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Open Long-bone Fracture Treated 8 Hours After Arrival**

Name: FILTER\_55  
Definition: Open Long-bone Fracture Treated 8 Hours After Arrival?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Femoral Diaphyseal Fracture Treated without Fixation**

Name: FILTER\_56  
Definition: Femoral Diaphyseal Fracture Treated without Fixation?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Transfused with More Than 10 Units of Blood Products**

Name: FILTER\_57  
Definition: Transfused with More Than 10 Units of Blood Products?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Died Prior to or During Hospitalization**

Name: FILTER\_58  
Definition: Died Prior to or During Hospitalization?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Hospitalized >= 14 Days**

Name: FILTER\_59  
Definition: Hospitalized >= 14 Days?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Remained in ICU >= 7 Days**

Name: FILTER\_60  
Definition: Remained in ICU >= 7 Days?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Waited at Scene More Than XX Minutes**

Name: FILTER\_61  
Definition: Waited at Scene More Than XX Minutes  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Treated at Scene More Than 20 Minutes**

Name: FILTER\_62  
Definition: Treated at Scene More Than 20 Minutes?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Total Prehospital Transport From Scene More Than 30 minutes**

Name: FILTER\_63  
Definition: Total Prehospital Transport From Scene More Than 30 minutes?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

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**Prehospital Report not in Medical Record**

Name: FILTER\_64  
Definition: Prehospital Report not in Medical Record?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Transferred to This Hosp After More Than 6 Hrs at Another Hosp**

Name: FILTER\_65  
Definition: Transferred to This Hosp After More Than 6 Hrs at Another Hosp?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

**Transferred to Another Hosp After More Than 6 Hrs at This Hosp**

Name: FILTER\_66  
Definition: Transferred to Another Hosp After More Than 6 Hrs at This Hosp?  
Calculated/Entered: Entered  
Code: 1 = Yes  
2 = No  
NA = Not Applicable  
NK/NR = Not known/Not recorded  
Range: 1-2  
Max Length: 1 (Integer)

## Appendix A

### Patient Care Transfer Reporting Form

DRAFT



Iowa Department of Public Health  
Iowa Trauma System  
Patient Care Transfer Reporting Form

This form or data elements contained within this form shall:

- 1 accompany all trauma patients transferred from one trauma care facility to another, or shall be submitted to the receiving trauma care facility within 24 hours after the transfer.
- 2 be mailed or faxed to the Bureau of EMS for all trauma patients who die at an Area or Community trauma care facility or transferred to an acute care facility out of state. The mailing address and fax number are as follows:

Iowa Department of Public Health, Bureau of EMS  
Lucas State Office Building  
321 E12<sup>th</sup> Street  
Des Moines, Iowa 50319

TTCF Name		TTCF Number	
Trauma ID #		MedRec#	Transferred by Vehicle #
Date Arrived	/ /	Time Arrived	Date Discharged
		Time Discharge	
Patient Name	Patient Age		
Inter-Trauma Care Facility Triage and Transfer Criteria Used	Not Used	Reason for Transfer	
Primary Survey & Vitals	Anatomical Injury High Energy Event/Risk for Severe Injury		
Chief Complaint			
Injury Narrative			
<b>INITIAL VITALS</b>		<b>ADMISSION/SURGERY AT THIS FACILITY</b>	
<b>DISCHARGE DISPOSITION</b>			
RespRate	NA	transferred to acute care facility	
Systolic BP	admitted without operation	name of acute care facility transferred to	
GCS Total	admitted with operation		
RTS	operation without admission		
<b>TRANSFERRING TRAUMA CARE FACILITY (TCF) (Data Element Definitions)</b>			

**TRAUMA CARE FACILITY NUMBER**

Indicates unique number that identifies the trauma care facility reporting data.

**TRAUMA ID NUMBER**

Indicates unique number assigned to this patient by the Iowa Department of Public Health, Bureau of EMS.

**MEDICAL RECORD NUMBER**

Indicates unique number assigned by medical records clerk for each trauma patient on each trauma care facility visit.

**DATE ARRIVED AT TRANSFERRING TRAUMA CARE FACILITY**

Indicates date arrived at transferring trauma care facility.

**TIME ARRIVED AT TRANSFERRING TRAUMA CARE FACILITY**

Indicates time arrived at transferring trauma care facility.

**PATIENT AGE**

Indicates designated trauma patient age.

**CHIEF COMPLAINT**

Statement of problem by patient or other person.

**INJURY NARRATIVE**

Indicates principal injury etiology to include position of patient in vehicle, chief complaint, 10 and general arrival condition of patient.

**INTER-TRAUMA CARE FACILITY TRIAGE AND TRANSFER CRITERIA**

Indicates inter-trauma care facility triage and transfer protocol was used to determine designated trauma patient arrival at this facility.

**GLASGOW COMA SCALE TOTAL AT TRANSFERRING TCF**

Indicates initial total Glasgow Coma Scale at transferring trauma care facility.

**SYSTOLIC PRESSURE AT TRANSFERRING TCF**

Indicates initial systolic pressure at transferring trauma care facility.

**RESPIRATORY RATE AT TRANSFERRING TCF**

Indicates initial, unassisted out of hospital respiratory rate.

**ADMISSION/SURGERY AT TRANSFERRING TCF**

Indicates admission/surgery at transferring trauma care facility.

**REVISED TRAUMA SCORE AT TRANSFERRING TCF**

Indicates initial Revised Trauma Score at transferring trauma care facility.

**REVISED TRAUMA SCORE AT TCF (PEDIATRIC)**

Indicates initial Pediatric Revised Trauma Score at transferring trauma care facility.

**TRANSFERRED FROM FACILITY NO.**

Indicates transferring trauma care facility number.

**TRANSFERRED BY VEHICLE NO.**

Indicates transferring service number.

**DATE DISCHARGED FROM TRANSFERRING TCF**

Indicates date discharged from transferring trauma care facility.

**TIME DISCHARGED FROM TRANSFERRING TCF**

Indicates time discharged from transferring trauma care facility.

**DISCHARGE DISPOSITION FROM THE TCF**

Indicates disposition on discharge from this trauma care facility.

**Appendix B****Trauma Care Facility List CORRECT ANY NAME CHANGES???**

<b>ID</b>	<b>Name</b>
000001	Adair County Memorial Hospital, Greenfield
000002	Alegent CreightonHealth Community Memorial Hospital, Missouri Valley
000003	Alegent Creighton Health Mercy Hospital, Council Bluffs
000004	Alegent Creighton Health Mercy Hospital, Corning
000005	Allen Health System, Waterloo
000006	Audubon County Memorial Hospital, Audubon
000007	Avera Holy Family Health, Estherville
000008	Baum-Harmon Mercy Hospital, Primghar
000009	Belmond Medical Center, Belmond (DBA Iowa Specialty Hospital of Belmond)
000010	Boone County Hospital, Boone
000011	Broadlawns Medical Center, Des Moines
000012	Buena Vista Regional Medical Center, Storm Lake
000013	Burgess Health Center, Onawa
000014	Cass County Memorial Hospital, Atlantic
000015	Central Community Hospital, Elkader
000016	Clarinda Regional Health Center, Clarinda
000017	Clarke County Hospital, Osceola
000018	Wright Medical Center, Clarion (DBA Iowa Specialty Hospital-Clarion)
000019	Community Memorial Hospital, Sumner
000020	Covenant Medical Center, Waterloo
000021	Crawford County Memorial Hospital, Denison
000022	Dallas County Hospital, Perry
000023	Davis County Hospital, Bloomfield
000024	Decatur County Hospital, Leon
000025	Genesis Medical Center, Dewitt
000026	Lakes Regional Healthcare Spirit Lake
000027	Ellsworth Municipal Hospital, Iowa Falls
000028	Floyd County Medical Center, Charles City
000029	Floyd Valley Hospital, Le Mars
000030	Fort Madison Community Hospital, Fort Madison
000031	Franklin General Hospital, Hampton
000032	Genesis Medical Center, Davenport
000033	George CGrape Community Hospital, Hamburg
000034	Great River Medical Center, West Burlington
000035	Greater Regional Medical Center, Creston
000036	Greene County Medical Center, Jefferson
000037	Grinnell Regional Medical Center, Grinnell
000038	Grundy County Memorial Hospital, Grundy Center
000039	Guthrie County Hospital, Guthrie Center
000040	Guttenberg Municipal Hospital, Guttenberg
000041	Hamilton Hospital, Webster City
000042	Hancock County Memorial Hospital, Britt
000043	Hawarden Regional Healthcare , Hawarden
000044	Hegg Memorial Health Center, Rock Valley
000045	Henry County Health Center, Mount Pleasant
000046	Horn Memorial Hospital, Ida Grove

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000047	Humboldt County Memorial Hospital, Humboldt
000048	Iowa Lutheran Hospital, Des Moines
000049	Iowa Methodist Medical Center, Des Moines
000050	Jackson County Regional Health Center, Maquoketa
000051	Jefferson County Health Center, Fairfield
000052	Jennie Edmundson Hospital, Council Bluffs
000053	Jones Regional Medical Center, Anamosa
000054	Keokuk Area Hospital, Keokuk
000055	Keokuk County Health Center, Sigourney
000056	Knoxville Hospital & Clinics, Knoxville
000057	Kossuth Regional Health Center, Algona
000058	Loring Hospital, Sac City
000059	Lucas County Health Center, Chariton
000060	Madison County Health Care System, Winterset
000061	Mahaska Health Partnership, Oskaloosa
000062	Manning Regional Healthcare Center, Manning
000063	Marengo Memorial Hospital, Marengo
000064	Marshalltown Medical & Surgical Center, Marshalltown
000065	Mary Greeley Medical Center, Ames
000066	Mercy Hospital of Franciscan Sisters, Oelwein
000067	Mercy Iowa City, Iowa City
000068	Mercy Medical Center - Cedar Rapids, Cedar Rapids
000069	Mercy Medical Center - Centerville, Centerville
000070	Mercy Medical Center - Clinton, Clinton
000071	Mercy Medical Center - Des Moines, Des Moines
000072	Mercy Medical Center - Dubuque, Dubuque
000073	Mercy Medical Center - Dyersville, Dyersville
000074	Mercy Medical Center - New Hampton, New Hampton
000075	Mercy Medical Center - North Iowa, Mason City
000076	Mercy Medical Center - Sioux City, Sioux City
000077	Sanford Hospital, Rock Rapids
000078	Mercy Medical Center-West Lakes, West Des Moines
000079	Mitchell County Regional Health Center, Osage
000080	Monroe County Hospital, Albia
000081	Montgomery County Memorial Hospital, Red Oak
000082	Myrtue Medical Center Memorial, Harlan
000083	Sanford Medical Center, Sheldon
000084	Orange City Area Health System, Orange City
000085	Osceola Community Hospital, Inc., Sibley
000086	Ottumwa Regional Health Center, Ottumwa
000087	Palmer Lutheran Health Center, Inc., West Union
000088	Palo Alto County Health System, Emmetsburg
000089	Pella Regional Health Center, Pella
000090	People's Memorial Hospital of Buchanan County, Independence
000091	Pocahontas Community Hospital, Pocahontas
000092	Regional Medical Center, Manchester
000093	Regional Health Services of Howard County, Cresco
000094	Ringgold County Hospital, Mount Ayr
000095	Sartori Memorial Hospital, Inc., Cedar Falls
000096	Shenandoah Medical Center, Shenandoah
000097	Sioux Center Community Hospital/Health Center, Sioux Center
000098	Cherokee Regional Medical Center, Cherokee
000099	Skiff Medical Center, Newton
000100	Spencer Hospital, Spencer

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000101	StAnthony Regional Hospital, Carroll
000102	StLuke's Health System, Inc, Sioux City
000103	StLuke's Hospital, Cedar Rapids
000104	Stewart Memorial Community Hospital, Lake City
000105	Story County Medical Center, Nevada
000106	The Finley Hospital, Dubuque
000107	Trinity Bettendorf, Bettendorf
000108	Trinity Regional Hospital, Fort Dodge
000109	Unity HealthCare, Muscatine
000110	University of Iowa Hospitals & Clinics, Iowa City
000111	Van Buren County Hospital, Keosauqua
000112	Veterans Memorial Hospital, Waukon
000113	Virginia Gay Hospital, Vinton
000114	Washington County Hospital & Clinics, Washington
000115	Waverly Municipal Hospital, Waverly
000116	Wayne County Hospital, Corydon
000117	Winneshiek Medical Center, Decorah
000118	Methodist West, West Des Moines
700000	Abbot Northwestern, Minneapolis, MN
700001	Canton Hospital, Canton, SD
700002	Clarkson, Omaha, NE
700003	Creighton Medical Center, Omaha, NE
700004	Franciscan Skemp Healthcare, La Crosse, WI
700005	Gunderson Lutheran, La Crosse, WI
700006	Immanuel, Omaha, NE
700007	McKennan Hospital, Sioux Falls, SD
700008	Prairie du Chien, Memorial Hospital, Prairie du Chien, WI
700009	Sioux Valley Hospital, Sioux Falls, SD
700010	St. Mary's, Rochester, MN
700011	University of Minnesota Hospital, Minneapolis, MN
700012	University of Nebraska Medical Center, Omaha, NE
700013	University of Wisconsin Hospitals, Madison, WI
700014	VA Medical Center, Madison, WI
700015	Trinity, Rock Island, IL
700016	Bergan Mercy, Omaha, NE
700017	Children's Hospital, Omaha, NE
700018	St. Elizabeth Hospital, Lincoln, NE
700019	Mc Donough District Hospital, Macomb, IL
700020	Blessing Hospital, Quincy, IL
700021	St. Francis Hospital, Peoria, IL
700022	St. John's Hospital, Springfield, IL
700023	Columbia Regional Hospital, Columbia, MO
700024	Boone County Hospital, Columbia, MO
700025	Barnes Jewish Hospital, StLouis, MO
700026	Hannibal Regional Hospital, Hannibal, MO
700027	Kirksville Regional Medical Center, Kirksville, MO
700028	VA Medical Center, Columbia, MO
700029	Rockford Memorial Hospital, Rockford,IL
700030	St. Anthony's Medical Center, Rockford, IL
700031	Methodist Hospital, Omaha, NE
700032	StJoseph's Hospital/Barrows Neuro Inst., Phoenix, AZ
700033	UNK-Out of State Rehab Facility
700034	Katherine Shaw Bethea Hospital, Dixon, IL
700035	Illini Hospital, Silvis, IL

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700036	Hammond-Henry Hospital, Geneseo, IL
700037	Trinity-7 <sup>th</sup> Street Campus, Geneseo, IL
700038	StJoseph's Medical Center, Joliet, IL
700039	Sioux Valley Hospital, Vermillion, SD
700040	Inwood, Canton, SD
700041	Carl TMacy Hospital, MacyNE
700042	U.SPublic Health Service, Winnebago, NE
700043	Niobara Valley Hospital, Lynch, NE
700044	Faith Regional Medical Center, Norfolk, NE
700045	Osmond Community Hospital, Osmond, NE
700046	Providence Medical Center, Wayne, NE
700047	Oakland Memorial Hospital, Oakland, NE
700048	StAnthony's Medical Center, O'Neil, NE
700049	StFrancis Hospital, West Point, NE
700050	Lundberg Memorial Hospital, Creighton, NE
700051	Madonna, Rehab Center, Lincoln, NE
700052	Memorial Hospital, Fremont, NE
700053	Plainview Public Hospital, Plainview, NE
700054	Craig Rehabilitation Center, Denver, CO
700055	Hennipen County Hospital, Minneapolis, MN
700056	Worthington Regional Hospital, Worthington, MN
700057	Gillette Children's Rehab, StPaul, MN
700058	Immanual StJoseph Hospital, Mankato, MN
700059	Galesburg Cottage Hospital, Galesburg, IL
700060	VA Medical Center, Des Moines, IA
700061	VA Medical Center, Iowa City, IA
700062	VA Medical Center, Knoxville, IA
700063	Remsen Rehab, Tulsa, OK
700064	Pioneer Memorial Hospital, Viborg, SD
000400	Other Inpatient Rehabilitation Facility
000401	Covenant Medical Center, Waterloo
000402	Genesis Medical Center, Davenport
000403	Great River Medical Center, West Burlington
000404	Mary Greeley Medical Center, Ames
000405	Mercy Medical Center - Des Moines, Des Moines
000406	Mercy Medical Center - Dubuque, Dubuque
000407	Mercy Medical Center - Sioux City, Sioux City
000408	StLuke's Hospital, Cedar Rapids
000409	Younkers Rehabilitation Center, Des Moines
000500	Other Outpatient Rehabilitation Faciltiy
000600	Other Skilled Nursing Facility
000700	Other Intermediate Care Faciltiy
000800	Other Residential Care Facility
000900	Other
917999	Other Illinois Facility
920999	Other Kansas Facility
927999	Other Minnesota Facility
929999	Other Missouri Facility
931999	Other Nebraska Facility
946999	Other South Dakota Facility
955999	Other Wisconsin Facility
999999	Other Out-of-State Facility

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\*Please contact the Bureau of EMS Data Coordinator before adding any new facilities to the list. The list will be distributed periodically to assure uniform assignment of numbers to facilities.

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## Appendix C

### Iowa FIPS Codes

FIPS Code	Name	FIPS Code	Name	FIPS Code	Name
19001	Adair	19067	Floyd	19133	Monona
19003	Adams	19069	Franklin	19135	Monroe
19005	Allamakee	19071	Fremont	19137	Montgomery
19007	Appanoose	19073	Greene	19139	Muscatine
19009	Audubon	19075	Grundy	19141	O'Brien
19011	Benton	19077	Guthrie	19143	Osceola
19013	Black Hawk	19079	Hamilton	19145	Page
19015	Boone	19081	Hancock	19147	Palo Alto
19017	Bremer	19083	Hardin	19149	Plymouth
19019	Buchanan	19085	Harrison	19151	Pocahontas
19021	Buena Vista	19087	Henry	19153	Polk
19023	Butler	19089	Howard	19155	Pottawattamie
19025	Calhoun	19091	Humboldt	19157	Poweshiek
19027	Carroll	19093	Ida	19159	Ringgold
19029	Cass	19095	Iowa	19161	Sac
19031	Cedar	19097	Jackson	19163	Scott
19033	Cerro Gordo	19099	Jasper	19165	Shelby
19035	Cherokee	19101	Jefferson	19167	Sioux
19037	Chickasaw	19103	Johnson	19169	Story
19039	Clarke	19105	Jones	19171	Tama
19041	Clay	19107	Keokuk	19173	Taylor
19043	Clayton	19109	Kossuth	19175	Union
19045	Clinton	19111	Lee	19177	Van Buren
19047	Crawford	19113	Linn	19179	Wapello
19049	Dallas	19115	Louisa	19181	Warren
19051	Davis	19117	Lucas	19183	Washington
19053	Decatur	19119	Lyon	19185	Wayne
19055	Delaware	19121	Madison	19187	Webster
19057	Des Moines	19123	Mahaska	19189	Winnebago
19059	Dickinson	19125	Marion	19191	Winneshiek
19061	Dubuque	19127	Marshall	19193	Woodbury
19063	Emmet	19129	Mills	19195	Worth
19065	Fayette	19131	Mitchell	19197	Wright

## Appendix D

### State Codes

State Abbr.	State Fips	State Name
AL	1	Alabama
AK	2	Alaska
AZ	4	Arizona
AR	5	Arkansas
CA	6	California
CO	8	Colorado
CT	9	Connecticut
DE	10	Delaware
DC	11	District of Columbia
FL	12	Florida
GA	13	Georgia
HI	15	Hawaii
ID	16	Idaho
IL	17	Illinois
IN	18	Indiana
IA	19	Iowa
KS	20	Kansas
KY	21	Kentucky
LA	22	Louisiana
ME	23	Maine
MD	24	Maryland
MA	25	Massachusetts
MI	26	Michigan
MN	27	Minnesota
MS	28	Mississippi
MO	29	Missouri
MT	30	Montana
NE	31	Nebraska
NV	32	Nevada
NH	33	New Hampshire
NJ	34	New Jersey
NM	35	New Mexico
NY	36	New York
NC	37	North Carolina
ND	38	North Dakota
OH	39	Ohio
OK	40	Oklahoma
OR	41	Oregon
PA	42	Pennsylvania
RI	44	Rhode Island
SC	45	South Carolina
SD	46	South Dakota
TN	47	Tennessee
TX	48	Texas
UT	49	Utah
VT	50	Vermont



<b>State Abbr.</b>	<b>State Fips</b>	<b>State Name</b>
VA	51	Virginia
WA	53	Washington
WV	54	West Virginia
WI	55	Wisconsin
WY	56	Wyoming

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## Appendix E

### Mechanism of Injury/Injury Type Examples

#### A MTOS definitions

##### 1. Transportation-related injuries

- All transportation-related injuries are blunt if they are caused by contact with any internal or external part of the vehicle. So, for injuries resulting from vehicle crashes, you would code the mechanism of injury as blunt if someone receives:
  - Deep lacerations with openings to the outside from a blunt force that originates with any part of the vehicle(s) involved in the crash.
  - Deep lacerations from a piece of the vehicle that penetrates tissue from the outside of the body of the injured person
- If someone is thrown from their vehicle and impaled on a post, the impalement injury is a penetrating injury, because it was caused by a post which is separate from any internal or external part of the crashing vehicle(s).

##### 2. Amputations

- Amputations which are caused by sharp objects such as blades, knives, etc are considered to have a penetrating cause of injury
- Amputations caused by blunt mechanisms such as being pinned between two cars or deceleration in an MVA are considered to have blunt causes of injuries.

##### 3. Lacerations

- All lacerations are penetrating injuries. However, tissue which is sheared, torn, broken (including open fractures), etc, by a blunt force would be considered to have been caused by a blunt injury.

##### 4. Open Wounds

- If the cause of the injury is a blade, or other sharp or piercing object, then it's a penetrating injury
- An open wound caused by a sledgehammer does not have a sharp edge so it would be a blunt mechanism
- Injuries caused by a bottle which is thrown are blunt. However, injuries caused by a broken bottle used to stab a person are penetrating.

##### 5. Burns

- Burns are neither blunt nor penetrating, but thermal injuries

##### 6. Hypothermia/Frozen Tissue

- Code frozen tissue as thermal injuries

##### 7. Contusions

- Contusions are blunt injuries

##### 8. Pellet/BB/Gunshot

- All bullet/gunshot wounds, including BB and pellet wounds are penetrating/piercing injuries, depth of projectile does not matter

## 9. Machinery injuries

- Again, if a blade or sharp object caused the injury, it would be penetrating
- But if someone is crushed by machinery, the injury mechanism is blunt
- Degloving and avulsion injuries are usually caused by blunt mechanisms of injury

## B ICECI (International Classification of External Causes of Injuries) definitions

### 1. Blunt force:

- Contact w/blunt force:
  - i. Contacting moving object (e.g., hit by sports equipment, cudgel)
  - ii. Contacting static object: (e.g., walking into wall)
  - iii. Striking thrown or falling object
  - iv. Striking moving object
  - v. Contacting animal (except bitten, stung, clawed, scratched)
  - vi. Other contact with blunt force
- Application by bodily force:
  - i. Hit, struck, kicked, shaken, scratched, butted, twisted by another person
  - ii. Sexual assault by bodily force
  - iii. Other contact with a person
- Crushing
  - i. Pinching, crushing, between objects
  - ii. Crushing between persons
  - iii. Other crushing
- Falling, stumbling, jumping:
  - i. Same level from tripping
  - ii. Same level from slipping
  - iii. Other, same level
  - iv. Fall, <1 meter
  - v. Fall >1 meter
  - vi. Fall height unspecified
  - vii. Fall stairs, steps
  - viii. Other
- Abrading, rubbing
  - i. Caused by contact with machinery
  - ii. Other

### 2. Penetrating force:

- Cutting, tearing:
  - i. scratched by person, animal
  - ii. Cut, slice, slash with knife, etc.
  - iii. Tear, rip, saw (excludes by machinery, or from overexertion)
- Puncturing, stabbing:
  - i. (e.g., firearm, explosions; excludes medical care)
  - ii. Stabbed (skin cut, deep penetration)

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- iii. Firearm shot, BB, pellet, other shot projective, arrow
  - iv. Other

- Other specified/unspecified cutting, piercing, penetrating force

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## Appendix F

### EMS Agency List

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ID	Name
2001000	Trinity Ambulance Service, Rock Island
2001100	Rural /Metro Ambulance-Omaha, Omaha
2001200	American Ambulance Service, Omaha
2001300	Omaha Ambulance Service, Omaha
remove	Interstate EMS of PDC Inc, Praire du Chien closed
2010100	Adair Fire Department, Adair
2010200	Fontanelle Fire And Rescue, Fontanelle
2010300	Greenfield Fire & Rescue, Greenfield
2010400	Adair County Ambulance, Greenfield
2010500	Bridgewater Fire Dept& EMS, Bridgewater
2020200	Adams County Ambulance, Corning
2030100	Harpers Ferry Rescue, Harpers Ferry
2030200	New Albin Vol Fire Dept, New Albin
2030300	Area Ambulance Postville, Postville
2030500	Lansing EMS, Lansing
2030800	Waterville Rescue Squad, Waterville
2031000	Veterans Mem.Hosp.Ambulance, Waukon
2040400	Mercy Medical Ambulance, Centerville
2040500	Moulton Vol Ambulance Service, Moulton
2050100	Audubon Fire and Rescue, Audubon
2050200	Exira Fire Department, Exira
2060500	North Benton Ambulance, Vinton
2060800	Belle Plaine Area Amb Service, Belle Plaine
2060900	Blairstown Fire and Rescue, Blairstown
2066100	Newhall Fire Department, Newhall
2066300	Keystone First Responders, Keystone
2066400	Cedar/MtAuburn 1st Responders, Mt Auburn
2070200	Sartori Paramedic Services, Cedar Falls
2070400	Evansdale Fire Department, Evansdale
2070500	Hudson Vol Fire Ambulance, Hudson
2070600	La Porte City Fire Department, La Porte City
2070900	Waterloo Fire Rescue, Waterloo
2070901	Waterloo Fire Rescue/Sta.#4, Waterloo (satellite)
2070902	Waterloo Fire Rescue/Sta.#6, Waterloo (satellite)
2070903	Waterloo Fire Rescue/Sta#.8, Waterloo (satellite)
2071100	Dunkerton Ambulance Service, Dunkerton
2071300	Covenant Paramedic Service, Waterloo
2080100	Boone County Hospital, Boone
8078400	Air & Mobile Critical Care-new
2090100	Tripoli Ambulance Service, Tripoli
2090200	Waverly Municipal Ambulance, Waverly
2090300	Sumner Emerg Medical Services, Sumner
2090400	Readlyn EMS Association, Readlyn – new
2090700	Denver Ambulance Service, Denver

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2100100	Area Ambulance Service of Buchanan County, Independence
2100200	Jesup Ambulance Service, Jesup
2100400	Fairbank Fire Department, Fairbank
2110100	BVCH Ambulance/Storm Lake, Storm Lake
2110500	BV County Amb/Sioux Rapids, Sioux Rapids
2110600	BV County Amb/Albert City, Albert City
2110800	Newell Ambulance Service, Newell
2120100	Allison Bristow Ambulance, Allison
2120200	Aplington Ambulance Service, Aplington
2120300	Clarksville VolAmbService, Clarksville
2120400	New Hartford Ambulance, New Hartford
2120500	Parkersburg Ambulance Service, Parkersburg
2120700	Greene Vol Ambulance Service, Greene
2120800	Dumont Vol Ambulance Service, Dumont
2130200	Ron's Ambulance Service, Farnhamville
2130300	Lake City Ambulance Department, Lake City
2130400	Lohrville Ambulance Service, Lohrville
2130500	Manson Ambulance Service, Manson
2130600	Pomeroy Fire and Ambulance, Pomeroy
2130700	Rockwell City Ambulance, Rockwell City
2130800	Farnhamville EMS, Farnhamville
2140100	Carroll Co Ambulance Service, Carroll
2140200	Carroll Co Ambulance Service, Carroll
2140300	Carroll Co Ambulance Service, Carroll
2140400	Carroll CoAmbulance, Carroll
2140500	Templeton First Response Unit, Templeton
2150100	Anita Volunteer Fire & Rescue, Anita
2150200	Cumberland Vol Fire Dept, Cumberland
2150300	Griswold Fire & Rescue, Griswold
2150400	Massena Fire & Rescue, Massena
2150700	Atlantic Medivac Amb Serv, Harlan
2160100	Mechanicsville Ambulance, Mechanicsville
2160200	Stanwood Ambulance Service, Stanwood
2160300	Tipton Ambulance Service, Tipton
2160500	Bennett Ambulance Service, Bennett
2160600	Durant Volunteer Amb Inc., Durant
2160700	Clarence Ambulance Service, Clarence
2170200	Mason City Fire Department Ambulance, Mason City-new
2170400	Clear Lake Fire Department, Clear Lake-new
8170800	Med Trans Corporation, DBA Mercy Air Med., Mason City-new
2180500	Sioux Valley Prehospital Care, Cherokee
2180600	Marcus Fire Dept Ambulance, Marcus
2190500	Chickasaw Ambulance NH, New Hampton-new address
2200100	Clarke Co Ambulance Service, Osceola
2210100	Spencer Municipal Hospital Amb, Spencer
2210200	Peterson CRU, Peterson
2210400	Everly Fire and Rescue, Everly
2220100	Central Ambulance Service, Elkader
2220200	Guttenberg Ambulance Service, Guttenberg
2220300	MarMac Emergency Squad, McGregor
2220500	Strawberry Point Ambulance, Strawberry Pt
2221000	MFL Ambulance Service Inc, Monona
2230100	Andover Ambulance Service, Andover
2230200	Camanche Fire Department, Camanche

2230300	Clinton Fire Dept - Ambulance, Clinton
2230400	DeWitt Ambulance Service, DeWitt
2230500	Medic EMS - Clinton, Davenport
2230900	Wheatland EMS Ambulance, Wheatland
2236300	Delmar Volunteer Fire Dept, Delmar
2240100	Dow City Arion Fire & Rescue, Dow City
2240200	Crawford County Ambulance, Denison
2240300	Manilla Ambulance, Manilla
2250200	Dallas Co EMS, Adel
2250400	Dallas Co EMS, Perry
2250500	Granger Community Ambulance, Granger
2258300	Waukee Fire Rescue, Waukee
2260200	Davis County Hospital - EMS, Bloomfield
2270100	Decatur Co Hospital Ambulance, Leon
2280500	Colesburg Ambulance Department, Colesburg
2280600	Regional Medical Center of NE, Manchester
2280900	Earlville Fire Department, Earlville
2281200	Edgewood Ambulance Service, Edgewood
2286000	Greeley Fire Department, Greeley-new
2286400	Delhi First Responders, Delhi
2290100	Burlington Fire/Ambulance, Burlington
2290300	IA Army Ammunition Plant-Amb, Middletown
2290400	Mediapolis Community Ambulance, Mediapolis
2290600	Superior Ambulance Service, West Burlington
2300100	DCMH-MICS, Spirit Lake
2300200	Lake Park Rescue, Lake Park
2300300	Terril First Responders, Terril
2310400	Bi-County Ambulance Inc, Dyersville
2310600	Dubuque Fire Department, Dubuque
2310603	Dubuque Fire Department, Dubuque (Sattelite)
2310700	Epworth Community Volunteer Fire Department, Epworth
2310800	Farley Emergency Medical Services, Inc.Farley
2310900	Holy Cross Volunteer Fire Dept, Holy Cross
2311000	Asbury Fire Department, Dubuque
2311100	Paramount Ambulance Service-new
2311600	Bernard Fire and Rescue, Bernard
2316100	Centralia/Peosta Emergency Services, Peosta-new
2316400	Key West Fire and EMS, Key West-new
2316000	Sherrill Fire & Rescue Dept., Sherrill
2317300	Cascade Emergency Medical Services, Cascade-new
2320100	Estherville Ambulance Service, Estherville
2320200	Ringsted Benifited Fire Dept, Ringsted
2320300	Armstrong EMS Service, Armstrong
2330200	Fayette Ambulance Service, Fayette
2330300	Mercy OelweinAmbulance, Oelwein
2330700	Area Ambulance Clermont, Postville
2330900	Arlington Area Ambulance, Arlington
2331000	Tri-State Regional Ambulance, West Union-new
2340200	American Medical Response(AMR), Charles City
2340300	Nora Springs Vol Ambulance, Nora Springs
2350300	Franklin General Hospital Amb., Hampton
2360100	Hamburg Vol Fire Dept Rescue, Hamburg
2360200	Riverton Fire & Rescue, Riverton
2360300	Sidney Fire and Rescue, Sidney

2360400	Tabor Vol Ambulance, Tabor
2360500	Thurman Rescue, Thurman
2360600	Percival Fire & Rescue, Percival
2360700	Farragut Fire & Rescue, Farragut
2360800	Randolph Rescue, Randolph
2370100	Greene County EMS Inc, Jefferson
2370200	Grand Junction Rescue Unit, Grand Junction
2370300	Churdan Fire/Rescue, Churdan
2370500	Scranton Fire Rescue Unit, Scranton
2380100	Dike Vol Fire and Ambulance, Dike
2380300	Reinbeck Fire & Rescue Dept, Reinbeck
2380400	Wellsburg FD Ambulance, Wellsburg
2380600	City of Grundy Center Amb, Grundy Center
2390100	Bagley Community Ambulance, Bagley
2390300	Guthrie Center Fire & Rescue, Guthrie Center
2390400	Panora Rescue Squad, Panora
2390500	Stuart Rescue Unit, Stuart
2390700	Bayard Ambulance Service, Bayard
2390800	Menlo Fire and Rescue, Menlo
2400100	Jewell Fire & Rescue, Jewell
2400200	Kamrar Fire & Rescue, Kamrar
2400300	Stratford Rescue Unit, Stratford
2400400	Hamilton Hospital AmbService, Webster City
2400600	Williams Rescue and Ambulance, Williams
2406200	Ellsworth First Responders, Ellsworth
2410400	Garner Vol Ambulance Service, Garner
2410500	West Hancock Ambulance Service, Britt
2420100	Ackley Vol Ambulance Service, Ackley
2420200	Eldora Emergency Med Service, Eldora
2420300	American Medical Response, Iowa Falls
2420500	Union Emergency Service, Union
2420600	Radcliffe Ambulance Service, Radcliffe
2420700	Hubbard Ambulance Service, Hubbard
2430100	Dunlap Fire & Rescue, Dunlap
2430200	Logan Fire Rescue Association, Logan
2430300	Missouri Valley Fire & Rescue, Missouri Valley
2430400	Mondamin Fire & Rescue Inc, Mondamin
2430500	Persia Fire & Rescue, Persia
2430700	Woodbine Rescue, Woodbine
2430800	Outward Mobility Med Transport, Dunlap
2440400	HCHC Paramedic Ambulance Serv, Mt Pleasant
2450300	Reg.Health Services/Howard Co., Cresco
2460100	Gilmore City Ambulance, Gilmore City
2460200	Humboldt Ambulance Service, Humboldt
2460300	Renwick Ambulance Service, Renwick
2470100	Battle Creek Comm Amb Serv, Battle Creek
2470200	Holstein Fire Department, Holstein
2470300	Community Ambulance Service, Ida Grove
2480400	Iowa Co Ambulance-Williamsburg, Williamsburg
2480500	Iowa County Ambulance Service, Marengo
2490100	Bellevue Ambulance Service, Bellevue
2490400	Sabula Ambulance Service, Sabula
2490500	Jackson Co Ambulance Service, Maquoketa
2490600	Community Ambulance Preston, Preston



2490700	Community Ambulance Miles, Preston
2496400	Springbrook Fire and EMS, Springbrook
2500100	Baxter Rescue Unit, Baxter
2500200	Colfax Fire Department, Colfax
2500300	Kellogg Fire & Ambulance Dept, Kellogg
2500400	Newton Fire Department, Newton
2500500	Prairie City Ambulance, Prairie City
2500600	Reasnor Fire & Ambulance, Reasnor
2500700	Sully Rural Fire & Ambulance, Sully
2500800	Monroe Fire Department, Monroe
2510100	Jefferson County Ambulance, Fairfield
2520300	Johnson County Ambulance, Iowa City
2520400	SE Iowa Ambulance Service Inc, Iowa City
2530100	Anamosa Area Ambulance Service, Anamosa
2530200	Monticello Ambulance Service, Monticello
2530300	Oxford Junction Fire Dept, Oxford Junction
2530400	Midland Community Ambulance, Wyoming
2530500	Olin Ambulance Service, Olin
2536000	Morley First Responders, Morley
2540500	Keokuk Cty Ambulance Service, Sigourney
2550100	Algona Ambulance Service, Algona
2550400	Swea City Fire Dept Ambulance, Swea City
2550500	Titonka Ambulance Service, Titonka
2550600	Sentral Area Ambulance, Fenton
2550800	Bancroft Ambulance Service, Bancroft
2550900	Whittemore Ambulance Service, Whittemore
2551000	Lakota Ambulance Service, Lakota
2560100	Lee County EMS Ambulance, Donnellson
2560200	Lee Co EMS Ambulanc-Ft Madison, Fort Madison
2560300	Lee Co EMS Ambulance - Keokuk, Keokuk
2570200	Area Ambulance Service, Cedar Rapids
2570300	Center Point Ambulance Service, Center Point
2570400	Northeast Linn Ambulance Serv, Central City
2570700	Lisbon Mt Vernon Ambulance, Mt Vernon
2578100	Marion Fire Department, Marion
2578800	Hiawatha Fire Department, Hiawatha-new
8571040	Lifeguard Air Ambulance, Cedar Rapids-new
2580100	Louisa Co Responders-Ambulance, Columbus Jct
2580200	Morning Sun Comm Ambulance, Morning Sun
2580300	Wapello Community Ambulance, Wapello
2580400	Louisa County Responders-Letts, Columbus Jct
2590100	Lucas County Health Center Amb, Chariton
2600100	Lyon County Ambulance, Rock Rapids
2600200	Little Rock EMS, Little Rock
2600300	Inwood Rescue, Inwood
2610200	Madison County Ambulance, Winterset
2620100	Mahaska Hospital Ambulance, Oskaloosa
2620200	New Sharon Vol Fire Department, New Sharon
2620500	Fremont Ambulance Unit, Fremont
2622000	Eddyville Raceway Park / EMS, Oskaloosa
2630400	Melcher Dallas Fire & Rescue, Melcher Dallas
2630500	Knoxville Raceway Ambulance, Knoxville
2630700	Pleasantville EMS, Pleasantville
2630800	Knoxville Fire and Rescue, Knoxville

2630900	Pella Community Ambulance, Pella
2631200	American Ambulance-Knoxville, Knoxville
2636100	Clay Township Fire Rescue, Tracy
2640100	Marshalltown Paramedic Service, Marshalltown
2646000	State Center First Responder, State Center
2650200	Malvern Volunteer Rescue Inc, Malvern
2650300	Silver City Ambulance Service, Silver City
2650400	Pacific Jct Vol Ambulance, Pacific Jct
2650600	Medivac Ambulance Glenwood, Harlan
2650700	Glenwood Vol Fire Dept, Glenwood
2650800	Emerson Rescue, Emerson
2660100	Mitchell Co Ambulance Service, Osage
2660300	Riceville Amb Service Inc, Riceville
2670200	Burgess Hospital Ambulance, Onawa
2670400	Moorhead Rescue, Moorhead
2670600	Mapleton Ambulance Service, Mapleton
2670700	Ute Ambulance Service, Ute
2670800	Whiting Vol Fire, Whiting
2680100	Monroe Co Ambulance, Albia
2690200	Red Oak Fire Department, Red Oak
2690400	Stanton Fire & Rescue, Stanton
2690500	Villisca Ambulance Service, Villisca
2690600	Elliott First Response Team, Elliott
2700200	Muscatine Fire Department, Muscatine
2700700	West Liberty Vol Fire Dept, West Liberty
2710200	Hartley Ambulance (HEART), Hartley
2710300	Paullina Ambulance Service, Paullina
2710400	Primghar Ambulance, Primghar
2710500	Sanborn Ambulance Service, Sanborn
2710600	Sutherland Fire/Rescue/Amb, Sutherland
2710700	Sheldon Comm Ambulance Team, Sheldon
2710900	Archer Ambulance Service, Archer
2720200	OCAS/Sibley Division, Sibley
2720300	OCAS/Melvin Division, Melvin
2720400	OCAS/Ocheyedan Division, Ocheyedan
2726100	Ashton Comm Emergency Serv, Ashton
2730200	Coin Fire & Rescue, Coin
2730300	College Springs Vol Fire Dept, College Springs
2730600	Braddyville Rescue, Braddyville
2730700	Shenandoah Emergency Ambulance, Shenandoah
2730800	Shenandoah Ambulance Service, Shenandoah
2730900	C M H Emergency Med Serv, Clarinda
2731000	Essex Fire and Rescue Dept, Essex
2740100	PACH Ambulance, Emmetsburg
2740200	PACA/West Bend, West Bend
2740300	PACA/Graettinger, Graettinger
2740400	PACA/Ruthven, Ruthven
2750100	Siouxland Paramedics/Akron, Akron
2750200	Hinton Ambulance, Hinton
2750300	Kingsley Ambulance Service, Kingsley
2750400	LeMars Fire Rescue, Le Mars
2750700	Oyens Volunteer Fire Rescue, Oyens
2750800	Remsen Ambulance Service, Remsen
2750900	LeMars Ambulance Service, LeMars

2751000	Merrill Ambulance Service, LeMars
2760100	Fonda Ambulance Service, Fonda
2760200	Pocahontas Ambulance Service, Pocahontas
2760300	Rolfe Area Ambulance, Rolfe
2761000	Laurens Ambulance Service, Laurens
2770100	Altoona Fire Department, Altoona
2770200	Ankeny Fire Department, Ankeny
2770300	Clive Fire Department, Clive
2770600	Windsor Heights Fire Dept, Windsor Heights
2770700	Pleasant Hill Fire Dept, Pleasant Hill
2770800	Johnston Fire & Rescue, Johnston
2770900	American Ambulance, Clive
2771000	Polk City Vol Fire & Rescue, Polk City
2771100	Runnells Fire Department, Runnells
2771200	Urbandale Fire Department, Urbandale
2771300	West Des Moines EMS, West Des Moines
2771403	Des Moines Fire Department #3, Des Moines
2771404	Des Moines Fire Department #4, Des Moines
2771405	Des Moines Fire Department #5, Des Moines
2771406	Des Moines Fire Department #6, Des Moines
2771408	Des Moines Fire Department #8, Des Moines
2771409	Des Moines Fire Department #9, Des Moines
2771410	Des Moines Fire Department #10, Des Moines
2771500	Grimes Fire & Rescue Dept, Grimes
2771600	Saylor Township Fire Dept, Des Moines
2771800	Bondurant Emergency Services, Bondurant
2772000	Midwest Amb Service of Ia Inc, Des Moines
2772100	LIFeline Ambulance Service Inc, Des Moines
2772300	Fraser Ambulance, Des Moines
2772600	Northern Warren Fire Department, Des Moines
2772700	Mitchellville Fire Department, Mitchellville
2773200	Mercy Medical Center-DSM, Des Moines
2780100	Avoca Vol Rescue & Fire, Avoca
2780200	Council Bluffs Fire Dept, Council Bluffs
2780201	Council Bluffs Fire Dept, Council Bluffs
2780202	Council Bluffs Fire Dept, Council Bluffs
2780203	Council Bluffs Fire Dept, Council Bluffs
2780300	Macedonia Vol Fire Department, Macedonia
2780400	Minden Vol Fire & Rescue, Minden
2780500	Neola Vol Fire Dept, Neola
2780600	Oakland Vol Fire & Rescue, Oakland
2780700	Treynor Ambulance Service, Treynor
2780800	Walnut Fire Department, Walnut
2780900	Underwood Rescue, Underwood
2781000	Carter Lake Fire & Rescue, Carter Lake
2781100	Rual/Metro Amb.-Council Bluffs, Council Bluffs
2781200	Crescent Rescue, Crescent
2790300	Montezuma Fire Department, Montezuma
2790600	East Poweshiek Ambulance, Brooklyn
2790700	Midwest Ambulance Serv of Iowa, Grinnell
2800300	Ringgold County Ambulance, Mount Ayr
2810300	Sac County Ambulance/Sac City, Sac City
2810400	Sac County Ambulance/Schaller, Schaller
2810500	Sac County Ambulance/Lake View, Lake View

2810600	Sac County Ambulance/Odebolt, Odebolt
2820200	Le Claire Ambulance Service, LeClaire
2820800	Buffalo Ambulance, Buffalo
2821000	MEDIC, Davenport
2821001	MEDIC, Davenport
2821002	MEDIC, Davenport
2821003	MEDIC, Davenport
2821100	MEDIC - Eldridge, Eldridge
2821200	MEDIC - Bettendorf, Bettendorf
2821500	MEDIC EMS - LeClaire, LeClaire
2830400	Irwin Volunteer Rescue Squad, Irwin
2830600	Earling Fire and Rescue, Earling
2830700	Medivac Ambulance Rescue Corp, Harlan
2830800	Shelby Fire and Rescue, Shelby
2830900	Elk Horn Fire and Rescue, Elk Horn
2840100	Rock Valley Ambulance Assoc., Rock Valley
2840200	Hawarden Ambulance Association, Hawarden
2840300	Hull Ambulance and Rescue, Hull
2840400	Sioux Center Ambulance, Sioux Center
2840500	Orange City Comm Amb Service, Orange City
2840600	Hospers Ambulance Service, Hospers
2840700	Ireton Rescue Squad, Ireton
2840800	Granville Fire & Rescue, Granville
2840900	Boyden Ambulance, Boyden
2841000	Alton Ambulance, Alton
2850100	Mobile Intensive Care Service, Ames
2850200	Story County Medical Center, Nevada
2850300	Story City Ambulance Service, Story City
2856500	Colo Fire and Rescue, Colo
2860100	Dysart Ambulance Service, Dysart
2860200	Elberon Volunteer Fire Rescue, Elberon
2860300	Garwin Ambulance Service, Garwin
2860400	Gladbrook Lincoln Ambulance, Gladbrook
2860500	Tama Ambulance ServiceTama
2860600	Toledo Fire Dept Emerg Serv, Toledo
2860700	Traer Ambulance Service, Traer
2870100	Bedford Ambulance Service, Bedford
2870200	Blockton Ambulance Service, Blockton
2870400	New Market Vol Fire Dept, New Market
2870600	Lenox Ambulance Service, Lenox
2880200	Greater Comm Hosp Ambulance, Creston
2890900	Farmington EMS, Farmington
2891000	Van Buren County Ambulance, Keosauqua
2900100	Eldon Fire & Rescue Inc., Eldon
2900700	Eddyville Volunteer Fire Dept, Eddyville
2900800	Ottumwa Regional MICS, Ottumwa
2900900	Blakesburg First Responders, Blakesburg
2910100	Carlisle Fire Rescue, Carlisle
2910200	Milo Fire Rescue, Milo
2910300	Norwalk Fire Department, Norwalk
2910500	Lacona Fire Rescue, Lacona
2910600	Virginia Twp Fire Rescue, New Virginia
2910700	Indianola Fire Department, Indianola
2910800	Martensdale Fire Rescue, Martensdale

2911100	Hartford Vol Fire & Rescue, Hartford
2920100	Washington Co Ambulance, Washington
2920500	Wellman Volunteer Ambulance, Wellman
2930100	Wayne County Ambulance Service, Corydon
2940100	Trinity Regional Amb Service, Fort Dodge
2940200	Vincent Vol Ambulance Service, Vincent
2940300	Dayton Rescue Squad Inc, Dayton
2940400	SW Webster Ambulance Service, Gowrie
2940500	Clare Rescue, Clare
2950100	Buffalo Ct Vol Amb Service, Buffalo Center
2950200	Forest City Ambulance Service, Forest City
2950300	Thompson Rescue Unit, Thompson
2950400	Lake Mills Ambulance Service, Lake Mills
2950500	Winnebago Industries Ambulance, Forest City
2960100	Winneshiek Medical Center Paramedic Service, Decorah
2960200	Ossian Ambulance Service, Ossian
2966200	Frankville FD First Responders-new
2970100	Anthon Rescue Squad, Anthon
2970300	Correctionville Fire & Rescue, Correctionville
2970400	Cushing Fire Department, Cushing
2970500	Siouxland Paramedics Inc, Sioux City
2970600	Moville Ambulance Rescue Squad, Moville
2970700	Pierson Ambulance, Pierson
2970800	Salix Fire and Rescue, Salix
2971200	Sloan Fire & Rescue, Sloan
2971700	Bronson Community Ambulance, Bronson
2971800	Danbury Community Ambulance, Danbury
2972100	Oto Community Ambulance Serv, Oto
2972300	Sergeant Bluff Fire & Rescue, Sergeant Bluff
2972400	Lawton Ambulance, Lawton
2990100	Belmond Vol Ambulance Service, Belmond
2990200	Clarion Ambulance Service, Clarion
2990300	Eagle Grove Department of EMS, Eagle Grove
8078400	Air & Mobile Critical Care-new
9179999	Other Illinois Provider
9209999	Other Kansas Provider
9279999	Other Minnesota Provider
9299999	Other Missouri Provider
9319999	Other Nebraska Provider
9469999	Other South Dakota Provider
9559999	Other Wisconsin Provider
9999999	Other Out-of-State Provider

## Appendix G

### Neuromuscular Blockers/Sedatives/Anesthetics in Common Use

Trade name	Generic name	Duration of Effect
Amidate	Etomidate	3-12 minutes
Ativan	Lorazepam	6-8 hours
Anectine	Succinylcholine	5-10 minutes
Diprivan	Propofol	5-10 minutes
Ketalar	Ketamine	15-30 minutes
Nimbex	Cisatracurium	25-60 minutes
Norcuron	Vecuronium Bromide	30-45 minutes
Pavulon	Pancuronium Bromide	60 minutes
Tracrium	Atracurium Besylate	20-45 minutes
Versed	Midazolam	30-60 minutes
Zemuron	Rocuronium Bromide	15-30 minutes

## Appendix H

### Comorbidity List

Comorbidities	ICD-9 Codes	ICD-10 Codes
Asthma	493.9	J45.20-J45.22, J45.30-J45.32, J45.40-J45.42, J45.50-J45.52, J45.90-J45.92, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998
Cancer		
Bladder	V10.51, 188 (.0-.9)	C67 (.0-.9)
Bone	V10.81, 170 (.0-.9)	C40.0-C40.3 (.x0-.x2), C40.8 (.x0-.x2), C40.9 (.x0-.x2), C41 (.0-.4,.9)
Brain	V10.85, 191 (.0-.9)	C71 (.0-.9)
Breast	V10.3, 174 (.0-.9/Female), 175 (.0-.9/Male)	C50 (.0-.6,.8,.9), C50.x (.x1,.x2), C50.xx (.xx1,.xx2,.xx9)
Colon	V10.05, 153 (.0-.9)	C18 (.0-.9)
Kidney	V10.52, 189 (.0-.9)	C64 (.1,.2,.9)
Lung	V10.11, 162 (.2-.5,.8,.9)	C34 (.0-.3,.8,.9), C34.x (.x0-.x2)
Ovarian	V10.43, 183 (.0,.2-.5,.8,.9)	C56 (.1,.2,.9)
Prostate	V10.46, 185	C61
Uterine	V10.41, 179, 180 (.0,.1,.8,.9), 182 (.0,.1,.8)	C53 (.0,.1,.8,.9)
Diabetes		
With chronic complication	250 (.4-.7)	E10 (.0,.1,.6,.8,.9), E11 (.0,.1,.6,.8,.9), E12 (.0,.1,.6,.8,.9), E13 (.0,.1,.6,.8,.9), E14 (.0,.1,.6,.8,.9)
Without chronic complication	250 (.0-.3,.8,.9)	E10 (.2-.5,.7), E11 (.2-.5,.7), E12 (.2-.5,.7), E13 (.2-.5,.7), E14 (.2-.5,.7)
Dementia	290 (.0-.4,.8,.9), 294.1, 331.2	F01.5, F01.5 (.x0,.x1), F02.8, F02.x (.x0,.x1), F03.9, F03.x (.x0,.x1), F05, G30 (.0,.1,.8,.9), G31 (.01,.09), G31.1
Hypertension		
Complicated	402-405 (.0,.1,.9)	I11-I12 (.0,.9), I13 (.0,.1,.2), I13.1 (.0,.1), I15 (.0-.2,.8,.9)
Uncomplicated	401 (.0,.1,.9)	I10
CVA/Stroke	430, 431, 433 (.0-.3,.8,.9), 434 (.0,.1,.9), 436	I67.89
History of stroke w/o residual	V12.59	I60-I69 (.x,.xx,.xxx; excl. I69: .051-.054,.059;.151-.154,.159;.251-.254,.259;.351-.354,.359;.851-.854,.859; & .951-.954,.959)
History of stroke with hemiparesis still present	438.2	I69 (.051-.054,.059;.151-.154,.159;.251-.254,.259;.351-.354,.359;.851-.854,.859; & .951-.954,.959)
Psychiatric problems		
Depression	311	F31.3-F31.5 (.0-.3), F32 (.0-.9), F33 (.0-.3,.8,.9), F33.4 (.0-.2), F34.1, F43.21, F43.23
COPD	496	J44 (.0,.1,.9)
Seizure disorder	780.39	G40 (.0-.5,.8,.9,.A,.B), G40.xx (.00,.10,.20.30,.A0,.B0,.40,.50,.80,.90), G40.xxx (.xx1-.xx4,.xx9)
Chronic respiratory failure		
Emphysema	492.8	J43 (.0-.2,.8,.9), J98 (.2,.3)
Transient cerebral ischemia	435 (.0-.3,.8,.9)	G45 (.0-.2,.8,.9), G46 (.0-.2)
History of transient cerebral ischemia	V12.59	Z86.73
Heart disease		
Coronary artery disease (CAD)	414.01	I25 (.x,.xx,.xxx)
History of congestive heart failure (CHF)	428	I09.9, I11.0, I13.0, I13.2, I25.5, I42.0, I42.5-I42.9, I43.x, I50.x, P29.0
Chronic renal failure	585 (.1-.6,.9)	
Pregnancy	V22.2	Z33 (.1,.2)
Obesity	278 (.0-.4,.8,.00-.03)	E66 (.x,.xx)
Alcohol dependence		
Acute alcohol intoxication	303.0	F10.12 (.xxx)
Chronic alcoholism	303 (.00-.03)	F10.2 (.xx,.xxx)
Nondependent drug abuse		
Alcohol abuse	305 (.00-.03)	F10 (.x,.xx,.xxx)
Marijuana abuse	305 (.20-.23)	F12 (.x,.xx,.xxx)
Cocaine abuse	305 (.60-.63)	F14 (.x,.xx,.xxx)
Amphetamine or related acting sympathomimetic abuse	305 (.70-.73)	F15 (.x,.xx,.xxx)
Other, mixed, or unspecified drug abuse	305 (.90-.93)	F19 (.x,.xx,.xxx)